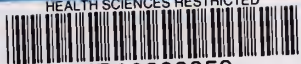


COLUMBIA LIBRARIES OFFSITE
HEALTH SCIENCES RESTRICTED



HR00200050

Columbia University
in the City of New York

THE LIBRARIES



Medical Library

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42



Digitized by the Internet Archive
in 2014

THE AMERICAN MEDICAL DIGEST

ISSUED IN MONTHLY PARTS

VOL. VIII.

JANUARY 15, 1889.

PART 1.

TWO DOLLARS A YEAR.

INDEX ON PAGE 2.

EDITED BY

JOHN C. LESTER, A.M., M.D.

COLLABORATORS.

ALEXANDER J. C. SKENE, M.D.,

Professor of the Medical and Surgical Diseases of Women and Diseases of Children, Long Island College Hospital; Professor Gynecology at N. Y. Post-Graduate Med. School.

ARTHUR MATHEWSON, M.D.,

Professor of Ophthalmology, Long Island College Hospital; Surgeon to Brooklyn Eye and Ear Hospital.

LANDON CARTER GRAY, M.D.,

Professor of Nervous and Mental Diseases, N. Y. Polyclinic.

BENJ. F. WESTBROOK, M.D.,

Chief of Dept. Diseases of Chest, at St. Mary's Gen. Hospital.

A. H. BUCKMASTER, M.D.

F. R. STURGIS, M.D.,

Professor Venereal Diseases, N. Y. Post-Graduate Med. School; Ex-President N. Y. County Medical Society; Visiting Surgeon to Charity Hospital.

GEORGE HENRY FOX, M.D.,

Clinical Professor of Diseases of the Skin, College Physicians and Surgeons, New York.

CHARLES JEWETT, M.D.,

Professor Obstetrics, Long Island College Hospital, ex-President Kings County Medical Society.

A. H. P. LEUF, M.D.,

Demonstrator of Anatomy and Histology and Lecturer on Pathology at the Pennsylvania School of Anatomy and Surgery.

R. G. ECCLES, M.D.

NEW YORK:

ANALYST PUBLISHING CO.

19 Park Place.

LACTOPEPTINE.

The most important Remedial Agent ever presented to the Profession for

Dyspepsia, Vomiting in Pregnancy, Cholera Infantum, Constipation, and all Diseases arising from Imperfect Nutrition.

LACTOPEPTINE precisely represents in composition the natural digestive juices of the Stomach, Pancreas and Salivary Glands, and will, therefore, readily dissolve all foods necessary for the recuperation of the human organism.

LACTOPEPTINE

IS COMPOUNDED WITH

Gentian, Iron, Strychnia, Bismuth, Quinia, Calisaya, Cinchona and Phosphates,

And various Medications required in general Practice in the form of

ELIXIRS, SYRUPS, LIQUIDS, Etc.

Special Notice to the Medical Profession.

Whenever satisfactory results are not obtained from the administration of **Lactopeptine** we will consider it a favor if such facts are reported to us, for there can be no doubt that substitution of Pepsin or some of the cheap imitations of Lactopeptine has been practised, whenever the therapeutic activity of Lactopeptine is not uniformly demonstrated in its indications, *Send address for our new MEDICAL ALMANAC, containing valuable information.*

THE NEW YORK PHARMACAL ASSOCIATION.

Box 1574.

NEW YORK.

SUCCUS ALTERANS.

(McDADE.)

SUCCUS ALTERANS is a purely vegetable compound of the preserved juices of *Stillingia Sylvatica*, *Lappa Minor*, *Phytolacca Decandra*, *Smilax Sarsaparilla* and *Xanthoxylum Carolinianum*, as collected by DR. GEO. W. McDADE exclusively for ELI LILLY & Co., and endorsed by DR. J. MARION SIMS.

SUCCUS ALTERANS continues to gain favor from its remarkable Alterative and Tonic properties, *eliminating specific poison from the blood and increasing the proportion of red corpuscles in anæmic patients* to a wonderful degree; is endorsed by the medical profession and in use by many hospitals of note.

SUCCUS ALTERANS in venereal and cutaneous diseases is fast supplanting Mercury, the Iodides and Arsenic; and is a certain remedy for Mercurialization, Iodism and the dreadful effects often following the use of Arsenic in skin diseases.

SUCCUS ALTERANS is also strongly recommended for its Tonic and Alterative effects in myriad forms of scrofulous disease, and in all cases where anæmia is a factor. Such patients rapidly develop a good appetite, sleep soundly and gain flesh rapidly. Many cases are on record where patients increased ten to twenty-five pounds in weight in a few weeks.

SUCCUS ALTERANS is giving satisfactory results in treatment of *Chronic Rheumatism* and can be used with confidence.

SUCCUS ALTERANS may be given for any length of time, without injury to the patient.

SUCCUS ALTERANS is put up in pint round amber bottles and *never in bulk.*

PHYSICIANS who have not received DR. McDADE's latest publication, the *MONOGRAPHIA SYPHILITICA*, should send their address, mentioning this journal, and we will mail a copy. It contains a paper, illustrated with colored plates, by DR. D. H. GOODWILLIE, of New York, on the "Sequelæ of Syphilis," reports of cases in practice and many other valuable papers.

ELI LILLY & CO., Pharmaceutical Chemists,
Indianapolis, Ind., U. S. A.

SUPPLIED BY ALL DRUGGISTS.

L. C. HOPKINS, President.

JNO. J. DONALDSON, Vice-Prest. and Treas.

DR. JAEGER'S Sanitary Woolen System Company,

827-829 BROADWAY, NEW YORK.

BRANCH STORES:

199 BROADWAY, New York,
(Western Union Building.)

366 FULTON STREET, Brooklyn.

THIS COMPANY, APPRECIATING the generous support which it has received during the past year, and REGARDING the oft-expressed hope that the prices of its goods might be brought within the ability of all buyers, has made a

GENERAL REDUCTION OF 25 PER CENT.

from the present Catalogue Prices, Shoes only excepted. THIS REDUCTION is made by the Company at all its Stores, as well as by all its Representatives, whose names will be found in its Catalogue. The COMPANY assures its patrons that the present **STANDARD OF EXCELLENCE** in its manufactures, will be **maintained**.

In addition to our complete assortment of *Underwear and Outer-clothing* for men and boys, we remind our patrons to our **LADIES' SANITARY UNDERVESTS, CHEMISES, DRAWERS, COMBINATION SUITS, NIGHT DRESSES, AND UNDERSKIRTS. THE CHILDREN'S VESTS, DRAWERS, COMBINATION SUITS, NIGHT DRESSES, SLEEPING COMBINATION SUITS, WITH AND WITHOUT FEET**, are made of the Best Stockinet Material, in White and Natural Color, and of **DOUBLE THICKNESS OVER THE CHEST AND VITAL ORGANS**. We add to these our *warm, soft and beautiful CAMEL-HAIR Double Faced Velour DRESSING GOWNS, SMOKING JACKETS and CAMEL-HAIR BATH ROBES*, in great variety, for selections most appropriate, acceptable and useful for Holiday presents.

Catalogues containing descriptions, illustrations, samples of materials, and a full price-list, free by mail. Orders or goods, by mail or express, and letters of inquiry, should be addressed to

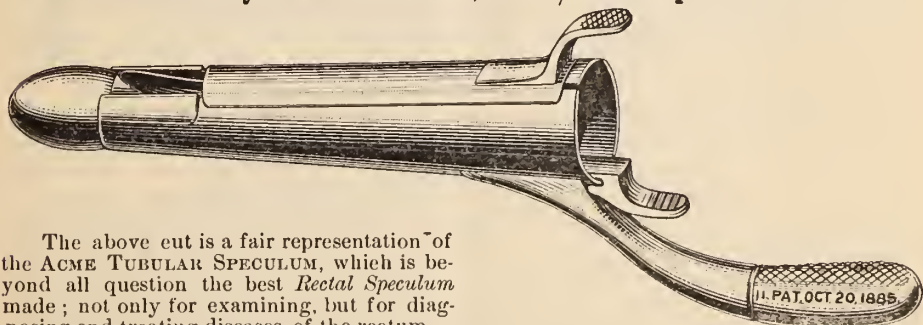
Dr. JAEGER'S SANITARY WOOLEN SYSTEM COMPANY,
827 and 829 Broadway, New York.

New York, Nov., 1888.

THE IMPROVED ACME TUBULAR SPECULUM.

Patented Oct. 20, 1885.

Manufactured by G. W. POWELL, M. D., Sole Proprietor of Patent.



The above cut is a fair representation of the **ACME TUBULAR SPECULUM**, which is beyond all question the best *Rectal Speculum* made; not only for examining, but for diagnosing and treating diseases of the rectum.

The *tube* is made of Phosphor Bronze, a flexible, tough and elastic metal, and its walls are so thin as to give for observation and operation, the greatest possible amount of space with the least amount of distention of the sphincters. The entering end of the tube is closed by a short conical removable plug, which is manipulated by a flat stem which lies along the inner surface of the tube. This plug may be withdrawn, after the speculum is inserted, for examining and treating parts above the end of the tube, or it may as conveniently be left in place while dealing with tissue through the slot of the tube.

The slot is closed by a slide which may be withdrawn to any extent desired by the operator; the slot may be widened or narrowed to meet the demands of each case, this is readily accomplished and its widened or narrowed capacity secured as needed, by means of the handles and the nuts on the cross bar. Thus it will at once be seen that the speculum may be used either with closed or opened end, and its slot running the entire length of the tube may be opened to any width bearable to the patient, while at the same time the sphincters are held entirely out of the way and uniformly supported.

No other speculum enables the surgeon to accomplish so much, and being so easy and painless to the patient, the success of the operator depends greatly on having a speculum in which treatment can be properly applied. Address,

Dr. G. W. POWELL, Moriah, N. Y.

INDEX.

MEDICINE.

	PAGE		PAGE
Alcohol and its Effects.....	4	Hypnotism in Diseases of Nose and Throat.....	15
Antifebrine Poisoning—a Case of.....	3	Malarial Cachexia—Treatment of.....	2
Creoline—as an Internal Medicine.....	4	Nose and Throat—Hypnotism in Treatment of.....	15
Diphtheria	3	Pile Remedy.....	8
“ and Croup—Are they Identical?	3	Purgative Action of Galvanic Current.....	8
Disinfectants and Disinfection.....	6	Tracheotomy and Intubation—Substitute for.....	11
Gastric Affections—Diagnosis of.....	9	Typhoid Fever—Accidental Rashes in.....	2
Gout—Dr. Pollock on	7	“ “ Dr. Wilson on	1
Gunzburg's Test—Uselessness of.....	9	Typhlitis—Treatment of.....	9
Heart Disease—Da Costa on.....	15		

SURGERY.

	PAGE		PAGE
Anæsthesia—Ether Required to Produce.....	4	Gonorrheal Infection of Mouth.....	12
Bladder—Capillary Aspiration of.....	11	Gonorrhea—Pyæmia as a Sequel.....	12
Brain—Traumatic Subdural Abscess of.....	4	Hydrocele—Professor Forbes on.....	14
Cerebral Troubles—Operative Interference in.....	5	Incision and Drainage in Pulmonary Gangrene.....	8
Collis's or Barton's Fracture.....	2	Joint Disease—Rest in Treatment.....	9
Eye-Ball—Operation for Excision, Coppez.....	15	Mouth—Gonorrheal Infection of.....	12
“ “ “ “ “ Sydney Stephenson.....	16	Occipital Bone—Peculiar Ossification of.....	8
Forearm—Fractures Above Lower Third.....	1	Pulmonary Gangrene—Incision and Drainage in ..	8
Fractures—Barton's or Collis's	2	Tattoo-Marks—Removal of.....	14
“ of Forearm Above Lower Third.....	1	Thyroid Gland—Whitehead on.....	7
Goitre—Cannabis Sativa in	8		

DISEASES OF WOMEN AND CHILDREN, AND OBSTETRICS.

	PAGE		PAGE
Back Presentation—Spontaneous Evolution.....	12	Fibro-Myomata—Galvanic Treatment.....	5
Bag of Waters—Parvin on	14	New-Born—Antisepsis in.....	9
Child—Unilateral Chorea in	9	Pelvic Diseases—Influence of Pregnancy in.....	15
Children—Antisepsis in New Born.....	9	Post-Partum Hemorrhage—Gill on	14
“ Epilepsy and Catarrh of the Duodenum..	9	Pregnancy—Influence of Pelvic Diseases on.....	15
“ Exudative Peritonitis in.....	11	Presentation—Back, Spontaneous Evolution	12
Cholera Infantum—Cold Water in.....	12	Sterility of Women—Microscope in.....	1
Female—Phimosis in.....	4	“ One-child.....	3
Fetus—Tissue Changes in.....	16	Vulva—Tuberculous Ulceration of.....	2
Book Notices			i
Publishers' Department.....			iii

DOCTOR, Do you want to buy or sell a
PRACTICE OR DRUG STORE?

PARTNERS, ASSISTANTS and SUBSTITUTES furnished. Some fine locations for sale. Send full particulars with stamp to

Dr. E. G. JONES,
372 Union Avenue. PATERSON, N. J.

Specify "Battle" when Prescribing Our Preparations.

Specify "Battle" when Prescribing Our Preparations.

BROMIDIA

THE HYPNOTIC.

FORMULA.—

Every fluid drachm contains 15 grains EACH of Pure Chloral Hydrat., and purified Brom. Pot., and one-eighth grain EACH of gen. imp. ext. Cannabls Ind. and Hyoscyam.

DOSE.—

One-half to one fluid drachm in WATER or SYRUP every hour, until sleep is produced.

INDICATIONS.—

Sleeplessness, Nervousness, Neuralgia, Headache, Convulsions, Colic, Mania, Epilepsy, Irritability, etc. In the restlessness and delirium of fevers it is absolutely invaluable.

IT DOES NOT LOCK UP THE SECRETIONS.

PAPINE

THE ANODYNE.

Papine is the Anodyne or pain-relieving principle of Opium, the Narcotic and Convulsive Elements being eliminated. It has less tendency to cause Nausea, Vomiting, Constipation, Etc.

INDICATIONS.—

Same as Opium or Morphia.

DOSE.—

(ONE FLUID DRACHM)—represents the Anodyne principle of one-eighth grain of Morphia.

BATTLE & CO.,

CHEMISTS' CORPORATION,

BRANCHES:
76 New Bond Street, London, W.

5 Rue de la Paix, Paris.

9 and 10 Dalhousie Square, Calcutta.

ST. LOUIS, MO.

COLDEN'S

LIQUID BEEF TONIC.

ORIGINAL LABEL:
"Colden's Liebig's Liquid Extract of Beef
and Tonic Invigorant."

An Invaluable Aid in the Treatment of all Cases of Debility.

ESTABLISHED 15 YEARS. ENDORSED BY SCORES OF PHYSICIANS. BEWARE OF IMITATIONS.

ESSENTIALLY DIFFERENT FROM ALL OTHER BEEF TONICS.

COLDEN'S LIQUID BEEF TONIC consists of the Extract of Beef (by Baron Liebig's process), spirit, rendered non-injurious to the most delicate stomach by extraction of Fusel Oil, Soluble Citrate of Iron, Cinchona, Gentian, and simple aromatics. An official analysis of this preparation by the eminent chemist, ARTHUR HILL HASSALL, M.D., F.R.S., and an endorsement of by Sir ERASMUS WILSON, F.R.S., is printed on the label of each bottle.

In the treatment of all cases of Debility, Convalescence from severe illness, Anæmia, Malarial Fever, Chlorosis, Incipient Consumption, Lack of Nerve Tone, and of the Alcohol and Opium Habits, and all maladies requiring a Tonic Nutrient, it is superior to all other preparations.

It acts directly on the sentient gastric nerves, stimulating the follicles to secretion, and gives to weakened individuals that first prerequisite to improvement, an appetite.—By the urgent request of several eminent members of the medical profession, I have added to each wineglassful of this preparation two grains of SOLUBLE CITRATE OF IRON, and which is designated on the label WITH IRON, "No. 1;" while the same preparation, WITHOUT IRON, is designated on the label as "No. 2."

I will, upon application, send a sample bottle of COLDEN'S LIQUID BEEF TONIC to any physician in regular standing. Please ask your Dispensing Druggist (if he has not already a supply) to order it. In prescribing this preparation physicians should be particular to mention "COLDEN'S," viz., "EXT. CARNIS FL. COMP. (COLDEN)." It is put up in pint bottles, and CAN BE HAD OF WHOLESALE AND RETAIL DRUGGISTS GENERALLY THROUGHOUT THE UNITED STATES.

C. N. CRITTENTON, Sole Agent, 115 Fulton Street, New York.

GLENN'S SULPHUR SOAP.

All physicians know the great value of the local use of Sulphur in the TREATMENT OF DISEASES OF THE SKIN. GLENN'S SULPHUR SOAP is the ORIGINAL and BEST combination of its kind, and the one now generally used. For sale by all Druggists at 25 cents a cake, or three cakes for 80 cents. Beware of counterfeits.

Wholesale Depot, C. N. CRITTENTON, 115 Fulton Street, New York.

Please mention this Journal.

Samples of above Soap sent free on application to any physician enclosing card.

CONSTANTINE'S PINE TAR SOAP.

BY FAR THE BEST TAR SOAP MADE. Has been on trial among physicians for very many years as a toilet soap and healing agent, and its superior virtues have been unanimously conceded in ALL CASES WHERE THE USE OF TAR IS INDICATED.

Unsolicited expressions of its excellence have been received from the Medical Faculty generally. None genuine unless stamped "A. A. Constantine's Persian Healing Pine Tar Soap." For sale by all Druggists.

A NEW USE FOR Liquid Peptonoids.

Successfully used in Dissolving the False Membrane in Diphtheria.

A Physician writes : " *In an experience of over thirty years I have never used any thing to equal your LIQUID PEPTONOIDS as a local application with a spray. It will dissolve the membrane and destroy the diphtheretic odor in less than twenty-four hours. I use the LIQUID PEPTONOIDS full strength as a spray, two or three times a day, in bad cases.*"

Used successfully by another physician in two desperate cases :

" *I was induced to try LIQUID PEPTONOIDS in two very desperate cases of DIPHTHERIA. I think I never saw throats more heavily coated with exudate than were these, and I think I never saw it more rapidly disappear than in these cases, by frequent spraying with your LIQUID PEPTONOIDS.*"

LIQUID PEPTONOIDS can be taken by patients unable to ingest food in any other form. In *dyspepsia* and *loss of appetite* its effects are positive, its digestive properties assisting in the digestion of food taken and its peptogenic properties quickly stimulating the natural digestive secretions of the stomach.

Pancrobilin .

Prepared (in both Liquid and Pill form) from Extract of Pancreas and Bile.

This preparation is designed expressly to increase the digestion and absorption of fats.

We believe that the fat-digesting properties of pancreatic and bile are inseparable, and that without their union in the intestinal tract but little, if any, fat would be digested and absorbed.

PANCROBILIN will be found of great service in *Phthisis* and other wasting diseases, *Nervous Prostration*, *Constipation*, *Inanition*, *Malnutrition*, *Intestinal Indigestion* and wherever there is a failure to assimilate fats.

If the skin is first wet with LIQUID PANCROBILIN, the inunction of oils will be greatly facilitated.

LIQUID PANCROBILIN is put up in pound bottles.

PILL PANCROBILIN is put up in bottles holding 100 pills. The coating of the pills will resist acid digestion when given as directed, but will be quickly dissolved in the alkaline secretions of the duodenum.

Phospho-Caffein Comp.

(Granular Effervescing.)

Formula for each dessertspoonful :—

Caffein.

Acidi Phosphorici ãã, grains, ss.

Antipyrin.

Ext. Apii. Grav. dulc. (Celery), ãã grains, i.

Sodium Bromide, grains, v.

The satisfactory results produced by PHOSPHO-CAFFEIN COMP. in *Headaches*, *Neuralgia*, *Insomnia*, *Neurasthenia* and *general Nervous Irritability*, are not due to the effect of any one ingredient, but to the happy effect of the combination. A thorough series of comparative tests have demonstrated the superiority of the above formula over any other in the market.

REED & CARNRICK, New York.

An Important Communication TO PHYSICIANS.

Thirteen years have now elapsed since the introduction of SCOTT'S EMULSION of PURE NORWEGIAN COD LIVER OIL with HYPOPHOSPHITES of LIME and SODA, since which time its growth and development have been very large, not only in this country but in South America, Great Britain and a large part of Continental Europe, and it has, in a very large degree, supplanted the Plain Cod Liver Oil. Its success is largely due to the happy combination of all its components, making a perfect chemical union, that will not separate for years, which we believe is not true of any other Cod Liver Oil preparation.

The innumerable reports from Physicians, of the brilliant results obtained justifies the statement that in almost every case where Cod Liver Oil is indicated, the combination of Cod Liver Oil with the Hypophosphites as prepared in Scott's Emulsion is infinitely superior.

Physicians who have never tried this Emulsion, or who have been induced to try something else in its stead, will do us the favor to send for sample, and we know they will always use it in preference to plain Cod Liver Oil or any other preparation.

We also call your attention to the following preparations :

CHERRY-MALT PHOSPHITES.

A combination of the tonic principles of Prunus Virginiana, Malted Barley, Hypophosphites of Lime and Soda, and Fruit Juices. An elegant and efficient brain and nerve tonic.

BUCKTHORN CORDIAL (Rhamnus Frangula.)

Prepared from carefully selected German Buckthorn Bark, Juglans Bark, and Aromatics. The undoubted remedy for Habitual Constipation. Send for samples of the above—delivered free.

SCOTT & BOWNE, Mfg Chemists, 132 & 134 S. 5th Ave., N. Y.

Electro-Medical Apparatus.

Special attention is hereby called to my new and improved

CAUTERY BATTERY.

Its advantages are: its simple construction, perfect operation, low price, and durability. I will furnish this Battery complete and ready for use, for \$18, including the following attachments, viz.: Handles and Cords, 1 Knife, 1 Point, 1 Ecraseur. Over 200 now in successful operation in New York City. All Batteries guaranteed for 1 year. Address

MENO FEDDERN,

Park Ridge, Bergen Co., New Jersey.

I will gladly call and exhibit my Batteries at the office of any physician residing in New York or vicinity.

WANTED PHYSICIAN to take charge of a large Sanitarium and one who can invest \$5,000 to \$10,000 in order to be properly identified with the interests of the institution. Investment guaranteed to earn 10 per cent. Liberal salary paid, unexceptionable references required, and the closest investigation solicited. A personal interview can be arranged for, or further particulars secured by addressing,

H. L., care LORD & THOMAS, Chicago, Ill.

MEDICAL PRACTICES AND DRUG
Stores. Bought and Sold. Lists Free.
Address: THE MEDICAL TRANSFER BUREAU,
Lynn, Mass.

THE BEST OF AMERICAN.

Specify

PLANTEN'S CAPSULES.

Known as Reliable over 50 years for "General Excellence."

Established 1836.

H. PLANTEN & SON, 224 William Street
NEW YORK.

SOFT and HARD CAPSULES

FILLED, OF ALL KINDS.

Nine Sizes: 3, 5, 10 and 15 Min. and 1, 2½, 5, 10 & 15 Gram.

NEW KINDS:

WINTERGREEN, APIOL,

Sandalwood, Erigeron, Terebene, Etc.

Improved. Empty, 8 sizes.

Capacity in Grains: 12, 10, 5, 4, 2, 1, ½, ¼.
For taking medicines free of taste, smell, injury to the teeth, mouth or throat.

Rectal, Vaginal, Horse, For Liquids
3 Sizes. 6 Sizes. 6 Sizes. 8 Sizes.

Trial box of all above Empties, by mail, 25 cents,

Capsules for Mechanical Purposes.

New Articles, and Capsuling Private Formulæ, a Specialty. Sold by all Druggists. Samples free.

Specify PLANTEN'S on all orders.

8th YEAR OF PUBLICATION.

SUBSCRIBE FOR The American Medical Digest,

Price, \$2.00 per Annum.

It is the most popular Medical Journal issued, as it presents monthly, in a very attractive and readable form, a digest of the best current Medical Literature of this country and Europe, embellished with numerous wood cuts, and edited by well-known and distinguished writers.

In a review, Dr. Henry Reynolds says: "The American Medical Digest" presents a digest of the best current medical literature of this country and Europe. The most important and practical medical news and discoveries are brought in an available form to the attention of the busy practitioner with slight demands upon his time. It is one of the most valuable medical publications extant. Few publications, if any, so completely cover the whole field of medicine and surgery as does the "American Medical Digest," and the practitioner who can take but few medical journals should certainly subscribe for this one.

A Few Extracts From Letters Received.

OFFICE OF COLLEGE OF PHYSICIANS
AND SURGEONS, CHICAGO, ILL. }

* * but am so much pleased with it that I want to continue taking it, and want it to continue. * *

Yours, respectfully, A. REEVES JACKSON,
President—Professor of Surgical Diseases of Women,
and Clinical Gynecology.

INDIANAPOLIS, IND.

* * I am well pleased with your Journal, and remarked the other day to a fellow practitioner that I had taken the "American Journal of Obstetrics" for the past seven years, was taking the Journal of the "Am. Med. Ass'n," the "New York Med. Journal," the "Archives of Pediatrics," the "Independent Medical Investigator," the "Physio. Med. Jour. of Ind.," and the "Am. Medical Digest," and if I were compelled to give up all but one, I should hold to the Digest. * *

C. T. BEDFORD, Prof. Obstetrics, Gynecology,
and Diseases of Children,

ST. LOUIS, MO.

* * I like your Digest better than any other publication.
J. K. BAUDUY, M.D.

BOSTON, MASS.

* * I don't want to be without the Digest. * *
R. D. ELLIOTT, M.D.

COCHRANTON, PA.

* * It is just what I have been waiting for and expected to "die without the sight." * * We do need something like your publication. I admire its large clear type, and the general beauty of its make-up.
JAMES P. HASSLER, Surgeon.

CHICAGO, ILL.

* * I think it is one of the best medical Journals published—short and to the point.

PHILIP SATTLER, M.D.

BUFFALO, N. Y.

I am much pleased with the publication, and see in it a very valuable journal for ready reference to the busy practitioner
Very resp'y yours, M. B. FOLWELL.

CALDWELL, TEXAS.

* * I regard it as the cream of medical literature.
J. P. OLIVER, M.D.

TROY, N. Y.

* * I like its looks and character very much.
ARBA R. GREEN, M.D.

BUFFALO, N. Y.

* * It is an excellent work. P. H. STRONG, M.D.

HIRES, N. C.

* * I think there is more to be learned from the Digest than any other Journal I ever saw, at so small a price.
F. J. COOPER, M.D.

SCRANTON, PA.

* * I like your Journal and consider me a permanent subscriber. Yours truly, D. B. HAND, M.D.

135 LEXINGTON AVE., N. Y. CITY.

* * The Medical Digest is good. I like it very much.
Very respectfully yours, J. W. BARSTOW.

ELKTON, VA.

* * I do not think I can afford to be without the Digest.
C. C. GENTRY, M.D.

CORONER'S OFFICE, FLUSHING, N. Y.

* * The Digest, without any exception, is the most useful periodical I ever saw. H. J. MAYNARD, M.D.

JANESVILLE, WIS.

* * Think it is just the thing we need
DRS. G. W. CHITTENDEN & SON.

RICHMOND, INN.

* * I think it contains more valuable matter than I ever received for so little money.
F. F. DWIGGINS, M.D.

EDENBORO, PA.

* * The Digest meets the wants of the general practitioner more completely than any other Journal I know of.
F. G. GREENFIELD.

TROY, N. Y.

* * Again compliment you on the good judgment exhibited in the departments of your Journal, &c., &c.
E. J. FISK, M.D.

TREMPLEALEAN, WIS.

* * The Digest pleases me more than any medical publication I have ever seen; every inch is readable.
C. H. CUTLER, M.D.

WACO, TEXAS.

* * I am exceedingly pleased with the Digest.
Respectfully, H. A. SPEAR, M.D.

EATONTON, GA.

* * We are very much pleased with the Digest.
Drs. ETHERIDGE & ETHERIDGE.

BLAIRSTOWN, N. J.

* * Renew my subscription to the Digest. * *
I have formerly read its pages with interest and profit.
MILTON M. ARMSTRONG, M.D.

BELLEVILLE, PA.

* * I consider the Digest a valuable acquisition to medical science.
ANDREW GUILER, M.D.

BRIDGEPORT, CONN.

* * The Digest is indispensable.
F. J. YOUNG, M.D.

NORWAY, ME.

* * Could not be without the Digest any way.
FRANK H. TILTON, M.D.

AKRON, OHIO.

* * I feel that I can not get along without it.
L. S. ERIGHT, M.D.

THE AMERICAN MEDICAL DIGEST.

PART I.

MEDICINE.

THE NEW HYPNOTIC SULFONAL-BAYER.

SULFONAL was discovered by Prof. Eugen A. Banmann, of Freiburg University, and was first prepared by the Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld.

SULFONAL (Diethylsulfondimethylmethan) is in the form of colorless prisms, odorless and tasteless, melting at 125.5° C. (258° F.) and has the composition $(C_4H_9)_2S=C-(C_4H_9SO_2)_2$. It is slightly soluble in cold water, but easily soluble in hot water or alcohol.

SULFONAL was first examined as to its physiological and pathological effects by Prof. A. Kast, of Freiburg University, and its hypnotic action was discovered and studied by him.

Since then Sulfonal has been the subject of numerous trials and experiments by many eminent and experienced physicians. Their testimony is unanimously favorable, and the conclusions reached by them are as follows:

SULFONAL is a prompt and reliable hypnotic which in proper doses produces quiet, natural sleep, lasting a number of hours.

SULFONAL has no unfavorable effects on the heart and the circulation, nor on the temperature, the pulse, or the respiration.

SULFONAL produces no disagreeable secondary symptoms; the patients with very few exceptions awake from their sleep feeling strong and greatly refreshed.

SULFONAL does not interfere with the process of digestion.

SULFONAL is a hypnotic, and not a narcotic; it acts by giving rest to the cells of the cerebral cortex, thereby causing sleep.

SULFONAL does not create an unconquerable desire for its repeated use; there is no danger of a Sulfonal-habit. Neither is it necessary to increase the dose after long-continued use.

SULFONAL is best administered at supper time, dissolved in hot liquids, *e. g.*, a bowl of soup or broth, a cup of milk, tea, coffee, cocoa, etc.

These points will be found to be fully exhibited in the series of contributions contained in our pamphlet, which will be mailed on application.

SULFONAL-BAYER is supplied by us in half-ounce and one-ounce vials.

We prepare 5-grain and 15-grain Tablets of Sulfonal-Bayer. The Tablet form is admirably adapted to the purpose of administering this drug, as when they are placed in the liquids, they disintegrate and are thus received into the system.

We also put up Sulfonal-Bayer in the form of our Soluble Pills, containing five grains each.

THE NEW ANTIPYRETIC PHENACETINE-BAYER.

Phenacetine-Bayer (Para-Acetphenetidine) is a white, glossy, crystalline powder, perfectly tasteless, melting at 135° C.—307° F. and has the composition $C_{10}H_{11} < \begin{smallmatrix} O.C_6H_5 \\ NH \end{smallmatrix} (CO-CH_3)$.

It is slightly soluble in water, a little more soluble in glycerine, but most freely in alcohol.

Phenacetine-Bayer was first prepared by the Farbenfabriken, formerly Friedr. Bayer & Co., Elberfeld, and is of absolute purity and uniform quality.

Summarizing the superiority of Phenacetine-Bayer over other antipyretics and antineuralgics, the following conclusions are formed.

1. Phenacetine-Bayer is an efficacious antipyretic.
2. It does not develop any disagreeable or noxious after effects.
3. The dose required is half that of Antipyrine.
4. It is perfectly tasteless.
5. On account of its innocuousness and tastelessness, it is a valuable antipyretic both in adults and in children.
6. Phenacetine-Bayer is an important antineuralgic; its effect is more energetic than that of Antipyrine and does not cause lassitude or any other disagreeable symptoms.

Our Pamphlet on Phenacetine-Bayer, containing the valuable testimony of eminent physicians will be mailed on application.

We offer Phenacetine-Bayer in one-ounce vials, or in the form of our Soluble Pills of the strength of two and four grains to each pill.

W. H. SCHIEFFELIN & CO.,
170 & 172 WILLIAM STREET, NEW YORK,

Sole Licensees and Sole Agents for the United States.

Please mention the MEDICAL DIGEST.

T H E

AMERICAN MEDICAL DIGEST.

1889.

MEDICINE.

CONSTITUTIONAL DISEASES.

The Treatment of Typhoid Fever.

DR. J. C. WILSON, Physician to the Jefferson Medical College Hospital, treats his cases of enteric fever by the systematic use of laxative doses of calomel during the first ten days, and by carbolized iodine, as originally suggested by Professor Bartholow, throughout the course of the disease. The most careful attention is given to the details of nursing, dietetics and hygiene, and symptoms are treated as they become prominent.

Due regard being had to the peculiarities of individual cases, the general plan is as follows:

Upon the evening of admission the patient receives seven and a half to ten grains of calomel in combination with ten grains of sodium bicarbonate, at a single dose. If the case be still in the first week, which is not usual with hospital patients, this dose is repeated every second night until its third administration; if already in the second week, a single dose only is given. After the tenth day it is given cautiously

or omitted altogether. If there be constipation, the first dose of calomel is followed by two or three large stools, mostly of the consistency of mush, the later dose by stools decidedly liquid. Diarrhea is not regarded as a contra-indication. On the contrary, it almost always becomes less troublesome after the action of the mercurial. During the subsequent course of the disease, constipation is not allowed to continue at any time beyond the third day; but is relieved, as a rule, by an eight ounce enema of warm, thin gruel, slowly injected, or exceptionally by a five or seven and a half grain dose of calomel, the choice being influenced by the character and prominence of abdominal symptoms. Under this plan of treatment diarrhea is not commonly excessive. When necessary, it is treated by one grain suppositories of the aqueous extract of opium.

From the beginning the patient receives, at intervals of two hours during the day and three hours during the night, and immediately after the administration of nourishment, two or three drops of a mixture of two parts

tincture of iodine and one part pure liquid carbolic acid. This dose is administered in an ounce of iced water.

Unless the temperature exceeds 104° F., the fever calls for no special treatment, beyond cold sponging, which is practiced in every case at least twice in the twenty-four hours. A higher temperature receives prompt attention.

After trial of the list of new antipyretics, the choice is antipyrin. It is used in single doses of ten to fifteen grains, and repeated when the temperature again rises beyond 104° F. If this remedy fails of its effect, large compresses of several thicknesses extending across the chest and abdomen from the neck to the pubes, and freely wet with iced water, are used. The gradually cooled bath is held in reserve.

Alcohol has no necessary part in the routine treatment of enteric fever. Many cases do not require it; some are unquestionably benefited by it, while to a considerable proportion it is an absolute necessity. Dr. Wilson believes that the employment of alcohol in the treatment of fevers should be regarded not as a dietetic but invariably as a medicinal measure.

If perforation occurs during or after the period of defervescence, namely, in the fourth week or later, laparotomy should be performed.—*Coll. & Clin. Rec.*

Accidental Rashes in Typhoid Fever.

DR. J. W. MOORE (*Medical Press*) explained that it was not his intention to allude to the essential rose spot rash of typhoid fever or to the more common epiphenomena of the disease connected with the skin, such as *taches bleuâtres*, purpura spots, vibices and sudamina, or sweat vesicles; or, lastly, to the co-existence with typhoid fever of other specific diseases showing char-

acteristic eruptions, such as scarlatina, measles, variola and, above all, typhus. He desired rather to draw the attention to certain other accidental or adventitious appearances of the skin, which are of somewhat rare occurrence, and, from a diagnostic point of view, of considerable importance. These are: 1, simple hyperæmia; 2, miliary eruptions; 3, erythematous rashes; and 4, urticaria. Dr. Moore then detailed a series of cases which exemplified the occurrence of these accidental rashes, and summed up as follows: Not infrequently, in the course of typhoid fever, an adventitious eruption occurs, either miliary, urticarious or erythematous. When this happens, a wrong diagnosis of typhus, measles or scarlatina respectively may be made, if account is not taken of the absence of the other objective and subjective symptoms of these diseases. The erythematous rash is the most puzzling of all; but the prodromata of scarlet fever are absent, nor is the typical course of that disease observed. This erythema scarlatini-forme is most likely to show itself at the end of the first, or in the third week of typhoid fever. In the former case, it probably depends on a reactive inhibition of the vaso-motor system of nerves; in the latter, on septicæmia, or secondary blood poisoning; or both these causes may be present together. The cases in which this rash appears are often severe; but its development is important rather from a diagnostic than from a prognostic point of view; hence, no special line of treatment is required beyond that already employed for the safe conduct of the patient through the fever.—*Analectic.*

Treatment of Malarial Cachexia.

DR. J. J. MULHERON says that in the cachexia which ensues on the prolonged

action of the malarial poison the ferruginous tonics and the medicines known as alteratives, are indicated. The following, which he says might be known as the tincture of the five chlorides, is an excellent combination for this condition, as it is in poverty and depravity of the blood from any cause: \mathcal{R} . Hydrarg. chlor. corrosivi, gr. ii; tr. ferri chloridi; acidi hydrochlorici dil., āā f 3 iii; liquoris acidi arseniosi, f 3 iss; potassii chloridi, \mathfrak{z} ss; syrupum simplicem, q. s. ad f \mathfrak{z} vi. M. Sig. A teaspoonful in water four times a day.

He calls attention to the fact that it is the chloride and not the chlorate of potassium which is called for in this prescription. He thinks the average druggist will require to have his attention especially directed to this fact. The chloride of potassium, he says, is a peculiarly valuable salt in the treatment of anæmia. The necessary regulation of diet, hygienic precautions, etc., must receive attention.—*Medical Age*.

Case of Poisoning with Antifebrine.

J. MEYER (*Therapeutische Monatshefte*) reports a case of poisoning with antifebrine. The subject was a man 38 years old, disposed to attacks of catarrhal bronchitis, who was at the time suffering with an attack of migraine. A druggist of Berlin gave him two doses of antifebrine, each containing thirty grains, which the patient took within twenty-four hours. The first dose was well borne, but about fifteen minutes after taking the second dose, symptoms of poisoning manifested themselves. The latter consisted, in cold sweat, feeling of great prostration, anguish, palpitations, very small and frequent pulse. By-and-by a slight cyanosis spread over the face, lips and hands.

The patient was given a cup of black coffee, followed by castor oil; sinapisms

also were applied. The cyanosis gradually disappeared. The other toxic symptoms subsided but slowly, and for several hours the patient felt dejected.—*Medical and Surgical Reporter*.

Diphtheria.

A CORRESPONDENT of the *Medical World* gives the following as his treatment:

Spray the throat with a hand atomizer containing the following solution, warmed: \mathcal{R} . Potass. permang., gr. x; potass. chlor., gr. xx; aquæ calcis, \mathfrak{z} viii. M. Throw the spray directly against the surface coated with membrane every one or two hours, day and night.

Gargle often with equal parts of vinegar, and very hot water.

Constitutional: Every two hours give brandy or whiskey; a teaspoonful to a tablespoonful, according to age. Milk, half a cupful to a cupful. Egg, beaten up with milk, sugar and hot water. Beef tea, half a cupful. Rice, well boiled, Farinaceous articles of diet made up with milk. Medicine: \mathcal{R} . Quini. sulph., gr. xvj; acid mur. dil., 3 ij; tinct. ferri mur., 3 iij; hydrarg. bichlor., gr. ss; aquæ distil., ad. \mathfrak{z} iv. M. Give two teaspoonfuls to an adult, or half to one teaspoonful to a child every two hours.

Are Membranous Croup and Diphtheria Identical? Yes.

DR. I. N. LOVE, of St. Louis (*Journal of the American Medical Association*), gives the following reasons for concluding that membranous croup and diphtheria are identical:

One fact which is worthy of notice, and which is an additional argument in favor of the identity of the two diseases is that the classical treatment for croup has for years been the free exhibition of the mild chloride (coupled with

stimulation), with a view to its defibrinating effect. The secretory system has thus been stimulated, and the effect has been to favor the moistening and exfoliation of the exudation and antagonize the disposition to constitutional involvement.

Since the same plan of treatment has been applied to general diphtheria the tendency has been to the securement of a similar result, and the mortality reports present a more favorable showing. By the prompt recognition of the first appearance of diphtheria, and the immediate institution of imperative interference in the shape of free purging with mild chloride, local antiseptics rendering the infectious matter innocuous, and the continuance of constitutional measures which are germicides and stimulators of glandular action, first on the list being the bichloride, benzoate of soda, and large quantities of water, we can, without doubt, claim accomplishments that are tangible and positive.

I feel strong in the conviction that "croup" and diphtheria are one and the same disease, and that the teachings of pathological anatomy, as well as the clinical symptoms, will justify no other conclusion.

Creolin as an Internal Medicine.

DR. A. HILLER, Privat Docent in Breslau, publishes some remarks on this subject in the *Deutsche Med. Wochenschr.* The antiseptic properties and comparative innocuousness of creolin, as used externally, have been made known by Fröhner and E. v. Esmarch, and their conclusions are also confirmed by Dr. Hiller. But creolin is of the greatest use in various diseases of the stomach and intestines. Its anti-zymotic influence comes out most clearly when employed against the numerous processes of fermentation

and decomposition which accompany most, if not all, such diseases. "Its freedom from poisonous effects, and its perfectly non-irritant effects, make it an ideal antiseptic for the above group of diseases." Dr. Hiller asserts that creolin, given in strong gelatine capsules, in doses of between 3 and 15 grains three times a day, promptly and certainly relieves meteorism from whatever cause, whether constriction, typhilitis, catarrh, atony, or ileotyphus, and hopes thus to prevent perforation in the latter case. It was found equally efficient in simple flatulence, gastric dilatation, acute and chronic gastric catarrh, and diarrhea. Given in a case of tænia and one of oxyuris, its action was prompt and efficient as an anti-parasitic. But creolin appears unfitted for children, owing to their inability to swallow capsules. Creolin may also be used to irrigate the rectum in carcinoma cases; used thus in solutions of 1 in 500 it acts like a charm in purulent cystitis.—*British Medical Journal.*

Alcohol and Its Effects on the Human Body.

THE relative proportion of alcohol in some of our common beverages is as follows:

WINES.

	PER CENT.
Port.....	19—25
Sherry.....	18—19
Claret.....	12—17
Champagne....	12—14
New Cider.....	6—7
Hard Cider.....	10½

BEER.

Boston.....	4—6.3
Ottawa.....	5
Edinburgh Ale ..	7.5
Liverpool.....	8
Rochester.....	5.6
Allsopp's.....	6
Bass'.....	7

STRONGER DRINKS.

Brandy and Whiskey.....	48—56
Holland Gin.....	45—49
Swedish Gin.....	50—55
Absinthe.....	72—74

Most beverages are more or less

adulterated. The color of wines is largely given by fuchsin, cochineal, arsenic, grenat, and various aniline dyes. The color is frequently heightened by the use of lime. Alum and logwood are used for astringency. In 1886, 75,000 gallons of aniline dyes were shipped to California to color wines.

Professor Mulder tells that a great deal of port is made in which there is not a drop of port juice, but that it consists of a concoction of gum-benzoin, gum-dragon, red saunders, tartar, tartaric, citric, and oxalic acids, logwood; to which there have recently been added, to give it color and aroma, nitric acid and nitric ether.

It is usual to add common salt to beer to excite thirst. Alum and copperas make the high foam of porter. Brandy frequently contains nitric, sulphuric, and prussic acids, Guiana pepper, fusel oil, and numerous other sophistications.

The popular bitters mostly contain from 18 to 35 per cent. of alcohol. The author deprecates the use of "Beef, Iron, and Wine," because the beef extract as here used has no nourishing qualities, and the iron is almost inert.

It is stated by Baron von Leibig that a five-pound loaf of bread contains as much nourishment as 730 gallons of the best Bavarian beer.

The obesity of drinkers is owing to the prevention of the oxygenation of fat by the alcohol. There is a general fatty infiltration of the tissues. So remarkable is the alteration of the skin thus brought about, that its peculiar velvety feel is diagnostic of the potatory habit.

It is easy to trace alcohol into the blood and to show its presence there, but no one has ever shown that it undergoes any alteration while in the blood. The known facts are all to the contrary.

There is a supposition that it takes an atom of oxygen from the blood and becomes aldehyde, and another that it passes at once into water and carbonic acid developing aldehyde and acetic acid on its way. But these are suppositions merely. Alcohol must be rejected from the list of respiratory aliments, because it diminishes the excretion of carbonic acid and depresses bodily heat. Professor Martin found that an ounce of whiskey or brandy generally increases the frequency of the heart-beat but lessens its force. The kidneys throw off but a very small portion of the alcohol taken into the system. Most of it is excreted by the skin and lungs. The effects of the poison are particularly manifested upon the nervous system, and the most important symptoms are presented by the author in three groups, as follows:

First degree.—Excitation of the intellect, abundance and vivacity of ideas, animation of speech, loquacity, agitation, uncouthness of gesture and movement.

A gentle but temporary flush of heat, acceleration of pulse and respiration; with injection and turgescence of the skin of the face, and sometimes sweating.

Second degree.—Dullness of intelligence; incoherence in word and thought; irregularity and indecision in the movements.

Perversion of sensibility; imaginary sensation; tingling of the ears and buzzing. Derangement of vision. Feeling of constriction of the forehead.

Incoördination of the movements; indecision and irregularity in muscular contractions; uncertain and trembling walk. Loss of equilibrium.

Redness of face; swelling of jugulars; contraction of the pupils. Fullness of the pulse; irregularity and embarrassment of the respiration and circulation.

Third degree.—Complete suspension

of intelligence, sensibility, and movements. Torpor of the senses, and involuntary evacuation of urine and feces.

Face pale and haggard; eyes dull and glassy, with pupils permanently dilated.

Pulse small and bad; respiration snoring. Inertia complete.

As a result of this state of things, profound slumber follows, sometimes interrupted by dreams, and attended by a copious sweating. This sleep, which usually continues for many hours, may be prolonged from six to twenty-four and even forty-eight.—*Medical Register*.

Disinfection and Disinfectants.

CONCLUSIONS of the Committee on Disinfectants of the American Public Health Association.

The most useful agents for the destruction of spore-containing infectious material are:

1. *Fire*. Complete destruction by burning.

2. *Steam under pressure*— 105° C. (221° Fahr.) for ten minutes.

3. *Boiling in water* for half an hour.

4. *Chloride of lime*. (Should contain at least 25 per cent. of available chlorine.)—A 4 per cent. solution.

5. *Mercuric chloride*.—A solution of 1:500.

For the destruction of infectious material which owes its infecting power to the presence of micro-organisms not containing spores, the committee recommends:

1. *Fire*.—Complete destruction by burning.

2. *Boiling in water* for ten minutes.

3. *Dry heat*.— 110° C. (230° Fahr.) for two hours.

4. *Chloride of lime*.—A 2 per cent. solution.

5. *Solution of chlorinated soda*. (Should contain at least 3 per cent. of

available chlorine.)—A 10 per cent. solution.

6. *Mercuric chloride*.—A solution of 1:2000.

7. *Carbolic acid*.—A 5 per cent. solution.

8. *Sulphate of copper*.—A 5 per cent. solution.

9. *Chloride of zinc*.—A 10 per cent. solution.

10. *Sulphur dioxide*. (This will require the combustion of between 3 and 4 pounds of sulphur for every 1000 cubic feet of air space.)—Exposure for twelve hours to an atmosphere containing at least 4 volumes per cent. of this gas in presence of moisture.

The committee would make the following recommendations with reference to the practical application of these agents for disinfecting purposes:

For Excreta.—(a) In the sick-room:

1. Chloride of lime in solution, 4 per cent.

In the absence of spores:

2. Carbolic acid in solution, 5 per cent.

3. Sulphate of copper in solution, 5 per cent.

(b) In privy vaults:

1. Mercuric chloride in solution, 1:500. (The addition of an equal quantity of potassium permanganate as a deodorant, and to give color to the solution, is to be recommended.)

2. Carbolic acid in solution, 5 per cent.

(c) For the disinfection and deodorization of the surfaces of masses of organic material in privy vaults, etc.:

Chloride of lime in powder.

For clothing, bedding, etc.—(a) Soiled underclothing, bed-linen, etc.:

1. Destruction by fire, if of little value.

2. Boiling for at least half an hour.

3. Immersion in a solution of mer-

curic chloride of the strength of 1:2000 for four hours.

4. Immersion in a 2 per cent. solution of carbolic acid for four hours.

(b) Outer garments of wool or silk, and similar articles, which would be injured by immersion in boiling water or in a disinfecting solution:

1. Exposure in a suitable apparatus to a current of steam for ten minutes.

2. Exposure to dry heat at a temperature of 110° C. (230° Fahr.) for two hours.

(c) Mattresses and blankets soiled by the discharges of the sick:

1. Destruction by fire.

2. Exposure to super-heated steam, 105° C. (221° Fahr.) for ten minutes.

(Mattresses to have the cover removed or freely opened.)

3. Immersion in boiling water for half an hour.

Furniture and articles of wood, leather and porcelain.—Washing, several times repeated, with:

1. Solution of carbolic acid, 2 per cent.

For the person.—The hands and general surface of the body of attendants of the sick, and of convalescents, should be washed with:

1. Solution of chlorinated soda diluted with nine parts of water, 1:10.

2. Carbolic acid, 2 per cent. solution.

3. Mercuric chloride, 1:1000.

For the dead.—Envelop the body in a sheet thoroughly saturated with:

1. Chloride of lime in solution, 4 per cent.

2. Mercuric chloride in solution, 1:500.

3. Carbolic acid in solution, 5 per cent.

For the sick-room and Hospital wards.

—(a) While occupied, wash all surfaces with:

1. Mercuric chloride in solution, 1:1000.

2. Carbolic acid in solution, 2 per cent.

(b) When vacated, fumigate with sulphur dioxide for twelve hours, burning at least three pounds of sulphur for every 1000 cubic feet of air-space in the room; then wash all surfaces with one of the above mentioned disinfecting solutions, and afterwards with soap and hot water; finally throw open doors and windows, and ventilate freely.—*Journal American Medical Association.*

Treatment of Gout During the Intervals of Attacks.

DR. J. POLLOCK (*London Lancet*) says: By far the most important part of the treatment of gout is that which is concerned with the intervals of the disease, and to which I now wish to direct your attention. It is in this stage that so much can be done for the comfort and guidance of the gouty patient. But be careful not to overlook the individual in your efforts to combat his disease. In young and robust sufferers our advice may be plain and simple: Give up rich and luxurious living, renounce all stimulants, take plenty of exercise, avoid all kinds of excess; in fact, attend carefully to the general health, and you will keep the enemy at bay. The recommendation to "live upon sixpence a day and earn it" is not a bad one. But in dealing with the old and infirm, and with those whose health has been broken down by the disease, the case is very different. Here we must make great allowances, and carefully study the particular circumstances of each individual case. Attention to the general health is even more important, if possible, in such patients than it is in the young and comparatively healthy. We should insist upon the avoidance of all habits and surroundings that tend to impair the digestion,

to weaken the body, to worry the mind, and so to promote the accumulation within the system of the gouty material. Overwork, severe mental strain, fatigue, anxiety and all depressing influences are to be shunned. No doubt it is seldom easy to command the pleasant surroundings, the calm and peaceful life, the freedom from trouble and care, which are so desirable in the maintenance of health; but we must do the best we can, and get our patients to minimize, as far as possible, the evils that cannot wholly be dismissed. A moderate and regular amount of exercise should be taken, avoiding indolence on the one hand and over fatigue on the other. Where necessary, the bowels should be kept comfortably open by the use of mild, gentle aperients, and all the secretions maintained in good order. A light nourishing mixed diet is the best, not devoid of animal food; the meals should be regular, and the food well chewed. What about wines or spirits? for beer is generally quite out of the question. I have pointed out in a former post-graduate lecture on dyspepsia that a moderate amount of alcohol is useful in some persons to assist the digestion, and even in gout it may be required. Probably some spirit and water in small quantities is the safest kind of stimulant, but claret agrees well with many individuals, and even a light dry sherry may not prove injurious. We all know the story of the noble earl who was recommended by the vendor to try a well advertised wine as being free from gouty properties, but who replied that he had tasted the sherry and preferred the gout. With regard to medicines, where any are required, light vegetable tonics will be found very useful, especially in combination with alkalies. Our alkaline gentian mixture, substituting potash for

the soda it contains, with or without the addition of a little nux vomica, is an excellent prescription of the kind. If the patient is liable to indigestion, as is often the case, some ammonia, rhubarb and potash, with gentian and peppermint, may be given now and then with advantage. Quinine is of no special value as a mere tonic, and iron is undesirable except when there is marked anæmia or albuminuria, and then only the milder preparations should be used, and cautiously.

DIGESTIVE TRACT.

A Splendid Pile Remedy.

1.—*Ointment*.—℞. Powd. alum, 3 ij; powd. nutgalls, 3 ij; powd. acet. plumb., 3 j; morph. sulph., gr. v.; ung. simp. 3 i. M. S.—Apply twice a day.

2.—*Internal*.—℞. Comp. syr. senna. 3 iss; oil erigeron, 3 j. M. S.—Dessertspoonful once a day. Shake the bottle well before pouring out.

If the liver is torpid give in addition: ℞. Fl. ext. cascara sagrada, 3 ij; fl. ext. rhei; acid nitro muriat. dil. āā, 3 ij. M. S. Teaspoonful in an infusion of quassia.—*Medical Summary*.

Purgative Action of the Galvanic Current.

SOME time ago, Dr. SCHILDBACH published a paper containing the following statements, based on some experiments of his own: 1. A moderately strong galvanic current (cathode in the rectum, anode on the abdomen) gives rise to vivid peristaltic movements of the intestines. 2. A sitting of 10 or 15 minutes is followed by stools in one or two hours. To verify Schildbach's assertions, Dr. A. Chelmonski, a Polish practitioner, has recently undertaken a series of experiments in two healthy persons and in eight patients with habitual constipation. His results, as

described in his communication in the Warsaw *Gazeta Lekarska*, may be condensed thus: 1. In 9 out of 10 cases, the sitting was followed by defecation in from fifty minutes to twelve hours, the stools being of a gruel-like consistence. 2. In 4 of the 9 cases, the stools were followed in two hours by diarrhea. 3. In 3 of the 10 cases, during the electrization, there were observed facial pallor, extreme weakness of the pulse, perspiration, giddiness, and aural noises; while in one case a true syncope supervened. Dr. Chelmonski's general conclusions are to the effect that the laxative effects of the

current are not so rapid and satisfactory as Schildbach alleges, and that the current sometimes manifests an unpleasant influence both on the intestine and heart.—*Medical and Surgical Reporter*.

Uselessness of Gunzburg's Test.

M. CONSTANTIN PAUL (*La France Médicale*) reports that this test for free hydrochloric acid in the gastric juice is unreliable. A small amount of sulphureted hydrogen, such as might exist in a somewhat stale egg, or an alkaline solution of phosphate of soda, as well as hydrochloric acid, gives a rose or red color with test.—*N. Y. Medical Abstract*.

Diagnosis of Gastric Affections.

DR. SAUNDEY (*Provincial Medical Journal; Medical Record*) gives the following useful table:—

Symptoms.	Gastrodynia.	Atonic Dyspepsia.	Gastric Catarrh.	Ulcer.	Cancer.
Character of pain	Dull, heavy	Dull, heavy	Burning soreness	Acute stabbing	Cutting
Locality	Epigastrium	Epigastrium	Behind sternum	In one spot	Epigastrium
Incidence	Immediately	After 1 or 2 hours	After 2 or 3 hours	Immediately	After 1 or 2 hours
Tenderness	Sometimes	None	None	Usually	Usually
Vomiting	Usually	None	Often some retching	Usually	Usually
Hæmatemesis	None	None	None	Usually	Usually
Tongue	Clean	Clean	Furred	Clean	Variable
Tumor	None	None	None	None	Usually
Age	Usually under 30	Any age.	Any age	Usually under 30	Usually over 40
Sex	Usually female	Either	Either	Usually female	Usually male

Treatment of Typhlitis.

SIR DYCE DUCKWORTH (*Lancet*) narrates several cases of typhlitis which are of value in showing the characteristic symptoms of this affection, and has indicated the proper methods of treatment. The first and most urgent symptom is that of pain in the right iliac region, usually very severe. Next follow the ordinary symptoms of peritonitis, more or less extensive in various

cases, with distension, perhaps vomiting and pyrexia, not usually exceeding a temperature of 102° F. The bowels are generally confined, this being due to the peritonitis. The face is flushed; the expression anxious. The pulse is rapid and soft. There is dorsal decubitus, and the legs may be drawn up. A hard, phlegmonous and tender tumor involving the cæcum is not unfrequently found. The pain may be referred to

other parts of the abdomen, and if there is distension there may be no distinct indications of the locality primarily affected, so that we may be thrown off our guard, and not suspect mischief at the cæcum or appendix. In some cases there may be no appreciable fullness or tumor in the right iliac region, and this is explained by the fact that the trouble being in the appendix, and not due to distended cæcum, is situate deep down in the abdomen and below the caput coli. One will in such a case, however, hardly fail to observe an important sign which helps to localize the mischief: resistance on the part of the right oblique, transversalis, and rectus abdominis muscles, which are called into action to protect the subjacent sensitive parts, contrasting thus very markedly with their fellows on the left half of the abdominal parietes. This is very significant. Failing this sign, you may in some cases suppose you have to deal with either intestinal obstruction from some cause, or with general peritonitis in association with this, or excited by some other lesion. When the bowels act, as they sometimes do, freely, you will have no anxiety as to obstruction. If there is constipation, you will next proceed to do what you must always do in such cases—viz.: examine for any herniæ, and also explore the rectum with the finger. With the existence of tenderness and tumor in the right iliac fossa, the diagnosis is almost complete in the presence of the other symptoms just referred to. Many cases of typhlitis happily terminate favorably. It is probably true that those which are least dangerous are those which early present an iliac tumor involving the caput coli and not the appendix. These are cases of cæcitis, due to impaction of indurated fæces, and there may or may not be perfora-

tion of the coats of the bowel, although inflammatory material is thrown out around its serous coat—a true perityphlitis. With simple treatment and careful dieting such cases often resolve and do well. The gravest cases are those involving the appendix, when perforation and consequent abscess occur. There is generally a tumor present, and the patient is obviously very ill. The symptoms here may supervene suddenly. There may have been none previously of any moment indicating disease of the appendix, but at once the patient is in peril.

If the contents of the appendix have reached the peritoneal cavity directly, death is certain within thirty-six hours, unless bold measures are tried with success. In such a case there is incoercible sour vomiting, generally of grass green bile, thready pulse, low temperature, suppression of urine, cold clammy skin, and collapse from general peritonitis, the mind remaining clear. If the contents of the appendix have not reached the peritoneal cavity, the abdomen becomes blown up, vomiting ensues, and pyrexia occurs. General peritonitis usually sets in, and a fatal issue occurs in a few days.

The cases reported by Dr. Duckworth would seem to indicate that this affection occurs most frequently in males, and is common in boys in the earlier decades of life, the appendix being more frequently affected than the cæcum. Simple treatment by opium and liquid food, with poultices, is proper at first, and if pain is considerable one may apply from four to eight leeches over the part. Later, the propriety of operating so as to reach pus must be considered, if it be present, and to remove the appendix. As a rule, all forms of aperient medicine must be carefully avoided. The best

guides to surgical interference are the persistent vomiting and tympanites, having always due regard to the general condition of the patient.

If it is believed that perforation and suppuration have occurred, an operation is warrantable, sometimes even when appearances are very unfavorable, for death is almost certain to ensue. It is a very nice determination to make, but in the present state of surgery one may have fewer apprehensions than formerly.

It is important to direct attention to the subsequent treatment of such cases as happily recover from urgent symptoms.

Great care is necessary in diet for a long time afterwards—for not less than twelve months. Only soft and bland food must be taken, and every particle that is hard and indigestible must be withheld. In particular, no crude vegetables or fruits containing seeds should be taken, and the skin and hard parts of all food should also be withheld. The patient must be taken into full confidence, and be made to understand the possible risks of carelessness in these respects.—*Therapeutic Gazette.*

DISEASES OF RESPIRATORY ORGANS.

A Possible Substitute for Tracheotomy and Intubation in Certain Cases.

DR. EDGAR HOLDEN, of Newark, N. J., in an article read before the American Laryngological Association, at its tenth annual congress, and published in the *New York Medical Journal* recently, said substantially :

A recent case of croupous stenosis, in which neither intubation was permitted because of resistance to the gag, nor tracheotomy because of preconceived notions, suggested a device for divulsion. This was to be inserted by puncture

through the superior angle made by the thyroid alæ. It consisted of two narrow strips of gold lying flat together, an inch and a half long, an eighth of an inch wide, and a thirty-second of an inch thick, which bowed after introduction to any desired extent by the approximation of their protruding ends. The trivial incision was, of course, through the base of the epiglottis, but no larger than that made by a small tenotomy knife. This was abandoned through fear of necrosis



Fig. 1.

and because it dilated only the supra-glottic larynx, and could be used only on the well developed patient. A better method suggested itself, which is the occasion of this essay.

As the matter of danger from either tracheotomy or intubation is to be weighed in suggesting a possible substitute, may I take the risk of annoying you with what you already know, and hastily enumerate the principal sources of this? For tracheotomy: hemorrhage, erysipelas, gangrene, necrosis of cartilage, sepsis through the wound, ulceration of the trachea, inflammation from

inspiration of air unmodified by the normal passages. For intubation: apnoea and laceration of tissue from prolonged efforts at introduction, interference with deglutition and nourishment when most essential to improvement, occlusion of the tube or of the trachea by pushing down the membrane, ulceration of the trachea, by pressure of the tube and consequent sepsis or necrosis, aspiration of retained secretions, inflammation from

ysis of the abductors, spasm, œdema, etc., the danger from sepsis is far less, and the question becomes one of tolerance of a foreign body.

With reference to this, the catheterism of Desault (1793), the tube of Bouchut (1801), Fig. 10, the experience of Loiseau, Weinlechner, Green, Reese, and a host of others with which you are familiar, and the tubes of Dr. O'Dwyer, in these forms of stenosis, have estab-



Fig. 2.

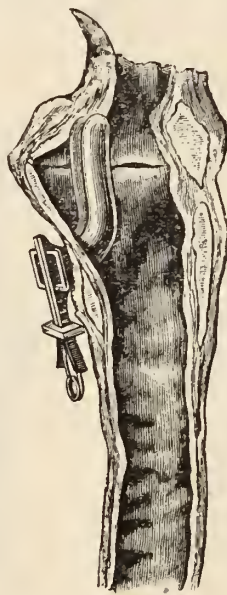


Fig. 3.

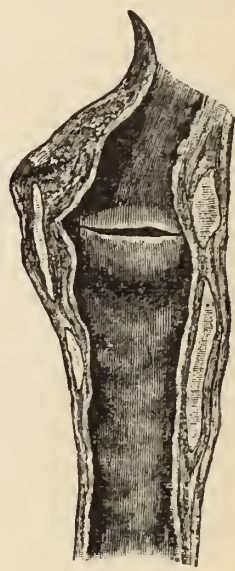


Fig. 4.

the passage of food into the respiratory tract, expulsion of the tube by cough when no one is near to replace it, coughing up and swallowing the tube, forcing the tube downward in efforts at removal, or injury from forcible attempts to seize the tube with the extractor.

I think it self-evident that the size and character of the open wound of tracheotomy greatly enhance the mortality (for, however carefully made, it is practically a contused and lacerated wound). This, of course, is especially true in pseudo-membranous disease. In occlusion by neoplasmata, in hypertrophic or hyperplastic changes, paral-

lized the fact that the larynx will bear indefinitely the presence of a smooth metallic body.

As to the tolerance of the larynx under dilatation, the experiences you have already heard to-day, and those of Mackenzie, Störck, Schrötter, Liston, Trendelenburg; the dilators of various types and patterns—Navratil's, Whistler's, McSherry's; the flexible metal bougies of Dr. Asch; and the many ingenious expedients given in medical literature—combine to testify, without columns of figures, as to the possibilities in this direction.

Now, so far as I have been able to

learn, all attempts at dilatation, catheterism, tubage, or intubation have been made either through the mouth or from below through the tracheal cannula, and these methods all commend themselves for cases to which they are individually applicable. The method I would submit differs radically from any of these. It is divulsion through the crico-thyreoid space. There is nothing new under the sun, and it is quite possi-

ble that some one has before entertained the same idea, although I have not been able to find a record of it. The divulsor is quite small, and consists of two blades hinged at the base. They may vary from three-quarters of an inch to an inch and a quarter in length, from an eighth of an inch to a fourth of an inch in width, and from a sixteenth of an inch to an eighth of an inch in thickness. It is curved to the shape of the larynx, so as not to impinge upon the base of the epiglottis. A handle with a blade for perforation, accompanies it, detachable instantly after introduction, different size divulsors being adapted to the

same blade. This handle, however, is not essential, as the perforation can be made with a tenotomy knife. The two blades flare at the lower end, which is to remain outside, the smaller ends, when introduced, clasping the perforating knife and curving upward, while the knife handle curves downward. Once in, the flanges are pressed slightly together, the blade is withdrawn, and the divulsor is closed, passed upward



Fig. 5.



Fig. 6.

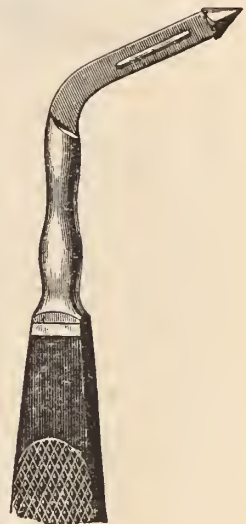


Fig. 7.

ble that some one has before entertained the same idea, although I have not been able to find a record of it. The divulsor is quite small, and consists of two blades hinged at the base. They may vary from three-quarters of an inch to an inch and a quarter in length, from an eighth of an inch to a fourth of an inch in width, and from a sixteenth of an inch to an eighth of an inch in thickness. It is curved to the shape of the larynx, so as not to impinge upon the base of the epiglottis. A handle with a blade for perforation, accompanies it, detachable instantly after introduction, different size divulsors being adapted to the

into place, separated, and held by a small sliding plate. The trivial wound is thus closed by the instrument, a small portion of which alone remains in sight. The crico-thyreoid space, readily detected by the finger, can be perforated instantly; the perforation is easy, almost bloodless, and as harmless as any incised wound of the respiratory tract can be. The instrument can be withdrawn and reintroduced very quickly.

It is almost impossible to give a clear idea of this device without drawings, and these are submitted, together with two of the instruments.

Colored drawings of the larynx, made

by me from dissections on the recent subject, are submitted to show the normal lateral constriction of the larynx, with its supraglottic and subglottic portions (Fig. 1), the appearance upon antero-posterior section (Fig. 4), the



Fig. 8.



Fig. 9.

instrument introduced through the crico-thyroid space (Fig. 5), and the same in a larynx contracted by a preservative fluid (Fig. 3). Fig. 6, 7, 8, 9, 10, and 11 show the instrument, with the handle and blade for perforation and introduction, and also the various appearances of the divulsor when detached. These are of the actual size adapted to the adult larynx; those for children and infants are of the same shape, but shorter, to be used with the same blade and handle. A short for-

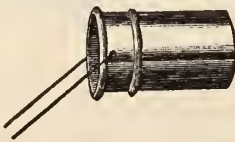


Fig. 10.



Fig. 11.

ceps (Fig. 12) accompanies the divulsor to aid in manipulation.

Fig. 13 shows the position of the hand in introduction necessary to prevent a too deep perforation and consequent wounding of the posterior laryngeal

wall. As the drawings sufficiently explain the device, and the instrument itself is before you, it will perhaps be

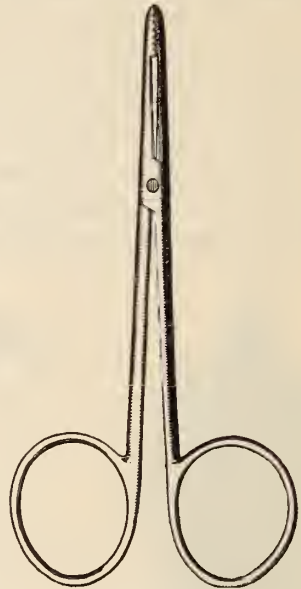


Fig. 12.

unnecessary to give a more detailed description.

It is quite possible that in great tumefaction of the larynx it will be desirable to use wider blades, and this would not



Fig. 13.

be difficult, nor would harm result from a slight transverse section of the dense fascia over the crico-thyroid space as

is done in Boze's operation, sometimes called bloodless tracheotomy.

This suggestion would not preclude a subsequent tracheotomy, nor a preliminary attempt at intubation. Whether or not the procedure is applicable to children under four years of age experience alone will show. It may perhaps occupy a place between the two familiar operations. It can be done by a tyro in the profession. It permits of breathing through the natural channels. It can be done with greater celerity than either tracheotomy or intubation. It will usually be bloodless, since the only artery likely to be wounded, the median branch of the superior thyreoid, very rarely rises so high as the crico-thyreoid space, and, if present, would be pushed aside by the spade-shaped blade. The instrument can be quickly withdrawn and replaced.

Hypnotism in Diseases of the Nose and Throat.

SCHNITZLER, of Vienna, in a case of paralytic aphonia (a girl of twenty) in which he had employed galvanism and all the other measures usually resorted to without success, induced hypnotism by directing the light of his head reflector into the patient's eyes. Dyspnœa, which had also been a prominent symptom of the case, immediately disappeared, while the voice was found to be normal and strong when she was awakened. The improvement lasted a few days, when the symptoms returned, to finally yield altogether, however, after a few *séances* of hypnotic sleep. In several other cases of the same kind, and in a stubborn case of spasm of the glottis, Schnitzler states that he was equally successful.

A very interesting case was that of a lady of twenty, in which laryngeal chorea accompanied general hemichorea.

Hypnotism, induced as in the other cases, caused immediate cessation of the twitches of the face and larynx and the jerks of the limbs. The benefit being of but brief duration, "suggestion" was added to the hypnotic sleep, resulting in a permanent cure.

In another case, one of nasal polypi, hypnotism was accidentally induced by one of his pupils by means of the frontal mirror. Several of the growths were snared away and their seats of implantation cauterized. Upon being awakened the patient was not aware of the operation, having suffered no pain whatever. Some time later, there being occasion to again operate, she was intentionally hypnotized, again undergoing the operation without the least suffering. This case, according to Schnitzler, was in nowise hysterical.—*International Klin. Rundschau*.—*St. Louis Medical and Surgical Journal*.

DISEASES OF CIRCULATORY ORGANS.

Therapeutics of Valvular Heart Disease.

PROFESSOR DA COSTA's comprehensive paper on this subject (*Trans. Assoc. of Amer. Phys.*) is worthy of the closest study. It embodies the results of years of experience in the management of cases of valvular disease. Great stress is laid on the fact that success in treatment depends far less on attention to the precise valve affected than on an intelligent recognition of the state of the cardiac muscle fibre, the size of the cavities, the condition of the vascular system, the age and cause of the valvular lesion, its secondary results, and the general health of the patient. In a "compensated" affection, cardiac drugs are not required, but efforts should be made to maintain the heart muscle and cavities in a healthy condition by regu-

lating the patient's daily life and habits. Excessive cardiac growth and force require cardiac sedatives, such as veratrum viride and aconite. Later, the appearance of œdema of the ankles, engorgement of the viscera, arterial ischæmia, irregular heart with increase in extent of area of impulse, but diminution in force, indicate failure of "compensation" and call for the persistent employment of moderate doses of digitalis. In slowly deteriorating compensation he has rarely found it necessary to exceed five minims of tincture of digitalis, twice daily, continued until the effect on the heart and pulse is perceptible, and then suspended, to be resumed according to circumstances. In cases where the compensatory cardiac hypertrophy is gradually lessening in proportion to the valvular defects, characterized by great aggravation of the above mentioned signs of failure of compensation, larger doses of digitalis exert a wonderful influence; twenty-five minims of tincture may be required every second or third hour. While taking these large doses the patient must keep at rest. The action of the drug is assisted by ammonia and brandy. The mischief having been checked, smaller doses of digitalis will maintain the good effect. With the above state of things, should the cardiac muscle fibre be undergoing degeneration—a condition not easy of recognition, but one we may suspect from the age and aspect of the patient, and the fact that the heart does not respond to cardiac tonics—digitalis or kindred agents are of less use, but may be tried. Stimulants should be used steadily, and arsenic or strychnia are worthy of trial.

Excessive hypertrophy with but slight dilatation, oftenest encountered in aortic affections, particularly regurgitation, is best treated by aconite, which

diminishes the arterial blood pressure. Professor Da Costa employs one minim of the tincture every fourth or sixth hour for a few days, and then only twice daily. Veratrum viride has similar applicability but is more apt to nauseate. He has often employed with the happiest results a combination of one drop of tincture of aconite, three drops of tincture of veratrum viride, with seven drops of tincture of ginger.

Extreme irregularity in the cardiac rhythm is a striking result of imperfect compensation. It is frequently present in mitral stenosis and calls for belladonna in full doses as an adjunct to digitalis. Given alone belladonna is of but slight use as a cardiac tonic.

The condition of the vascular system demands treatment equally with that of the heart. We have as yet no one remedy that will both increase cardiac power and lessen resistance *a fronte*. Digitalis increases the latter, and recent researches suggest that strophanthus acts similarly, though to a much less degree. Nitroglycerine and the nitrites lessen vascular resistance, but are without any direct effect on the cardiac muscle. By a judicious combination of nitroglycerine or atropine with digitalis or strophanthus we may obtain full cardiac power without resisting vessels.

Regarding the causes of valvular mischief, the most prominent is rheumatism, and following that the atheromatous changes of advancing years or Bright's disease. Unfortunately we possess no remedies to influence the results of rheumatic endocarditis, when the acute stage is fairly over. Three months after the attack the attempt is useless. Before this, recumbency with a course of iodides and blisters is worth trying. It generally fails, but may occasionally succeed. We have no solvents to influence degenerative states.—*Polyclinic*.

THE AMERICAN MEDICAL DIGEST.

PART II.

SURGERY.

THE AMERICAN MEDICAL DIGEST.

1889.

SURGERY.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

Fractures of the Forearm Above the Lower Third.

DR. JOHN BROWNRIGG, in an article read at the meeting of the Southern Surgical and Gynecological Association, and published in the *Medical and Surgical Reporter*, said:

Believing that we have not attained a perfect method of treating the most common fractures of the forearm, I present for your consideration some new appliances which have been used with good results. In these fractures it is best to prevent flexion, extension, pronation and supination of the forearm. It is also necessary to keep the forearm splints parallel to each other transversely and longitudinally.

The roller bandage has done so much harm in unskillful hands that I have abandoned its use except on the hand. With the elbow flexed at a right angle, the inside splint should be a little wider than the forearm, and long enough to extend from behind the elbow to the metacarpo-phalangeal articulation. The outside splint should be of the same

width, and long enough to extend from behind the elbow to near the styloid process of the ulna, and should be cut out under the thumb. Two pieces, of the same thickness as the splints and one inch wide, should be shouldered into the outside and inside forearm splints so as to present a plane surface with them, and secured to the splints with little nails, so that these pieces will be at right angles with the splints, and opposite the axis of the arm, and long enough to extend up the arm to below the prominence of the deltoid muscle. To these inch-wide pieces are tacked, next to the arm and above the elbow, two bands of tarboard, wide enough together to envelope the arm and meet above the forearm at the elbow as flexed, and extending upward as high as the inch-wide pieces. If higher, they will be pushed down by the prominence of the deltoid muscle, and the splints with them, so that the bones will be bent at the point of fracture. The pieces of tarboard should be soaked in hot water, so as to be moulded to fit the arm, and lined with cotton wadding and cloth next the skin.

The forearm splints should be cut an

inch longer than necessary, and, after the tarboard bands are tacked on, apply the splints, and mold the tarboard bands to fit the arm, and then cut the lower end of the splints off, the right length.

The forearm splints should be notched on their outer edges, to keep the strips of cloth to be tied around them from slipping. Strips of cotton wadding should then be laid on the side of the splints next the arm so as to fit the arm, in some places thick, in others thin, and a piece of cloth sewed around the cotton wadding and splints, drawn so tight as to cause the cotton wadding and cloth covering to present a slightly convex surface, as used by the late Dr. F. H. Hamilton on his forearm splints. Too much convexity is not desirable, as the bones may be pushed too far apart, particularly if the strips of cloth are tied too tight around them. There should be but little cotton under the hand and at the elbow.

When the bones are from any cause disposed to separate too far, a many-tailed bandage, applied at the point of separation and extending to the hand, will prevent it. Apply a narrow roller bandage to the hand from the wrist to near the end of the fingers, apply the splints, and, if they fit, bind them on with a few strips of cotton cloth, tied around the arm and forearm parts, so as to exercise gentle pressure. These strips can be loosened or tightened by any one as the arm swells or shrinks. These convex pads serve well to keep the bones apart, but caution is required in their use, as by binding them too tight the bones may be forced too wide apart or pressed out of position.

When the ulna is broken near its middle, the upper fragment is sometimes drawn away from, and the lower toward, the radius, so as to cause a separation of the broken ends. It is at this point

that ununited fracture often occurs. To prevent this, a strip of thin board, not quite so wide as the space between the lower edges of the forearm splints when applied, should be padded with cotton and rolled in cotton cloth and placed underneath the strips which bind the splints on, so as to keep the ulna straight. This thin board should be of the same length as the outside splint. The forearm should then be placed in a sling with thin strips of wood sewed in its upper edges.

Barton's or Collis's Fracture.

DR. J. BROWNRIGG (*Coll. and Clin. Record*) :

All the fractures at the lower end of the radius, whether transverse or comminuted, require extension and counter extension. These cannot be obtained by using the hand as a lever and the lower end of the ulna as a fulcrum, even when its semi-articulation with the carpus is not destroyed. The displaced fragments cannot be forced into position and kept there by coaptation splints, and if this could be accomplished, the amount of pressure required leaves the wrist and hand stiffened. Fractures near a joint almost always leave the joint stiffened unless early motion is resorted to. This inflammation is almost certain to attack the articulations of the carpus. Internal and external coaptation splints, no matter how shaped, prevent motion, and more or less pressure on the carpus is necessary. It is important to preserve the proper position of the lower end of the ulna in relation to the carpus. The cause of the loss of prominence of the styloid process of the ulna is due to the twisting of the carpus with the fragment of the radius attached inward, and it is also drawn to the radial side of the forearm by the contractions of the muscles attached to

the hand. This displacement of the lower end of the ulna is more marked when its semi-articulation with the carpus is destroyed. The contraction of the muscles causing this displacement should be resisted by extension and counter-extension. If one grasps the hand and twists it forcibly inward a good idea can be formed of the manner in which this displacement occurs. If the muscles of the forearm are resisted by extension and counter-extension in the direction of the axis of the radius, there will be a tendency to readjustment of the fragments, and with very little lateral support this can be accomplished. For this purpose I use a splint composed of an iron bar, sufficiently strong to prevent motion of the elbow, and to keep it flexed at a right angle. The bar extends from below the prominence of the deltoid muscle to the elbow, where it is bent so as not to press on the elbow, thence along the radial side of the forearm, which is between pronation and supination, the thumb being upward; to beyond the end of the first phalanges, the hand being flexed, where it is bent downward at a right angle about three inches. Where the bar passes over the thumb, it is bent upward so as not to press on it. In front of the arm a tarboard splint or band is riveted to the bar, wide enough to extend from the top of the bar to near the forearm, and long enough nearly to envelop the arm.

To the forearm part of this bar is secured a similar tarboard splint, by two strips of sheet iron, riveted to the tarboard splint and bent loosely over the iron bar, so that the splint can be made to slide up or down on the bar. This tarboard splint should be as wide as the forearm on its inside, and a little over half as wide on the outside of the forearm, care being taken that it is not wide enough to press on the styloid process

of the ulna nor on the ulna. It should be long enough to extend from near the elbow to the lower end of the radius. The hand should be flexed loosely, the ends of the first, second and third fingers resting easily on the ball of the thumb. A roller bandage about an inch and a half wide should be passed around the wrist three times and the end stitched. A broad band should be stitched to the bandage around the wrist on the back of the hand, and carried around the flexed fingers and stitched to the bandage on the inside of the hand at the wrist, to retain the fingers in a flexed position. The object of this is to preserve the parallel position of the metacarpal bones, and to prevent their being folded inward upon each other by the extension band, described as follows: A belt cut bias to fit the hand near the carpus, and buckled securely, so as not to slip over the hand, is applied. Two rings of brass or other metal are sewed to the lower edge of this belt, one on the outside and the other on the inside of the hand. Extension is obtained by a cord passed first over the bent lower end of the bar, the ends being then passed through the rings and tied over the bent end of the bar. Counter-extension is obtained by the pressure of the tarboard splint against the arm above the elbow.

The tarboard splints should be lined with cotton wadding and cloth next the skin, and secured to the arm and forearm by many-tailed bandages, the ends being tied together. After the cord is tightened sufficiently, the forearm tarboard splint should be slipped on the bar toward the hand until the lower end reaches near the carpus, and can be made to act as a coaptation splint at the point of fracture, but only gentle pressure is required, the contraction of the forearm muscles causing the dis-

placement being resisted by extension and counter-extension.

Sometimes a narrow roller bandage is required to keep the hand from swelling.

Constant slight motion of the carpus is permitted. When the splint is applied, the thumb should be under the iron bar. This can be secured by applying the belt around the hand so that the ring on the back of the hand will be near the thumb, and the one on the palmar side nearer the little finger. This causes the hand to be twisted outward, which is the reverse of the abnormal position resulting from the fracture.

If greater lateral pressure should be required, it can be obtained by two pieces of thin board placed transversely opposite the point of fracture, one inside and the other outside the forearm, the ends projecting a little so that cords can be tied around them below and above the forearm. These pieces will press as required on the tarboard splint. I have resorted to this only in a case of ununited fracture of 8 weeks' standing.

Traumatic Subdural Abscess of the Brain.

SIR WILLIAM STOKES, Professor of Surgery in the Royal College of Surgeons, Ireland, concludes a paper in the *Dublin Journal of Medical Science*, with the following deductions.

1. That after the primary symptoms of cerebral traumatism have subsided, there is frequently a latent period of varying length, during which there are no distinct brain symptoms whatever connected with abscess formations.

2. That their appearance is, as a rule, sudden, and if uninterfered with they run a rapidly fatal course.

3. That the occurrence of pus production resulting from cerebral traumatism is not incompatible with a perfectly apyrexial condition.

4. That this latter fact will probably aid in differentiating traumatic cerebral abscess from meningeal or encephalic inflammation.

5. That both as regards color and consistence there is great variety in the contents of cerebral abscess cavities, and that, as shown in Wilm's case, published by Rose, of Berlin, they may become transparent.

6. That antisepticism has largely diminished the risks of the operation of trephining.

7. That, having regard to the great mortality of cases of cerebral abscess when uninterfered with—viz., from 90 to 100 per cent.—the operation is indicated even when the patient is *in extremis*.

8. That, in the case when the trephine opening does not correspond to the situation of the abscess, exploratory puncture and aspiration may be employed.

9. That by the adoption of this measure the necessity for multiple trephine openings can be largely obviated.

10. That the employment of a blunt pointed aspirating needle, as suggested by Rentz, is probably the safest mode of exploration and evacuation.

11. That drainage is desirable in the after treatment of such cases.

12. That both during and subsequent to operative interference in these cases a rigid antisepticism is imperative.

The Time and Amount of Ether Required to Produce Anæsthesia.

DR. R. W. LOVETT, in an exhaustive article on this subject published in the *Boston Medical and Surgical Journal*, Dec. 6, 1888, makes the following statements:

Observations were made in sixty consecutive operations. The largest amount of ether required to anæsthe-

tize was four ounces. The smallest amount was one-half ounce, and in seven other instances only one ounce was needed. The average amount used in sixty cases was only two ounces.

The longest time required was 15 minutes. Twice it took 13 minutes, and quite often 10 or 11. The shortest time was 2 to 3 minutes in several patients etherized by force.

In general the attempt was made to etherize the patients without the use of force, and the ether was applied very carefully until the trachea became accustomed to it, and ceased being much irritated by inhaling the vapor, when the cone was placed nearer the nose, until finally the patient inhaled pure ether. In this way twenty-two patients reached complete anæsthesia without the least struggle. In eleven patients the forcible choking method was tried, and the ether was applied in full strength almost at once. In the twenty-two etherizations by the gentle method the average time required for anæsthesia was 9.3 minutes, while by the forcible method it only took 4.4 minutes. In the same way the average amount of ether used in the gentle method was two and one-half ounces, while the forcible method only required one and one-half ounces. But although by the forcible method the patient was etherized in less time with less ether, the results were much less satisfactory, for choking and struggling during the operation were much more common than when the gentle method was used. The application of the strong ether at once to the trachea seemed to excite a flow of mucous, which continued through the operation, and the patient was at the same time necessarily somewhat asphyxiated by this method in the beginning, and what seemed to be complete anæsthesia proved only too often

to be a mixture of anæsthesia and asphyxia, and a few breaths of air would often restore the patient to a violently struggling condition. In general, a patient who was etherized without a struggle almost invariably gave little or no trouble during the operation, however long it lasted, whereas a violent struggle often followed later in the operation by choking, persistent rigidity and general difficulty of etherization.

As a rule the operations were short ones, and the table shows the time that the etherization lasted, and the average amount of ether consumed during the whole etherization. Operation lasted:

Minutes.	Times.	Av. am't of ether used,	
10	7	"	2½ oz.
15	7	"	3½ oz.
20	19	"	3¾ oz.
25	7	"	5 oz.
30	10	"	6 oz.
35	4	"	3½, 4, 5 and 10 oz.
40	1	"	7 oz.
45	2	"	7.7 oz.
60	2	"	8.8 oz.
90	1	"	14 oz.

It will be seen that in general the amount of ether required for each additional five minutes was about one ounce.

In forty-three of the patients the after effects were carefully noted, and in twenty-eight there was no vomiting either during or after the operation, and no uncomfortable sensations beyond a moderate amount of nausea and dizziness. In eleven more the after effects were slight; the patient vomited once or twice, but there was no prolonged nausea or vomiting; while in six the after effects were long continued, and there was much vomiting. In general, the after effects were least when the smallest amounts of ether had been inhaled.

Indications for Operative Interference in Cerebral Troubles.

DR. T. O. SUMMERS (*The Medical Register*), Jacksonville, Fla.:

Under what conditions should the cranium be trephined?

Answer.—I. In lesion of the ventricles. In the ventricles of the brain two lesions are pathologically considered :

- a. Hemorrhage.
- b. Liquid effusions.

How are these to be determined?

Answer.—1. By persistent hemiplegia.

2. By persistent hemianesthesia.

3. By hemiopia.

4. By ptosis, attended with general or special paralysis in voluntary muscles.

Remarks.—Convulsions of a general character are of no localizing significance, and if, even in an acute lesion, they occur in such a lesion, and also in a chronic lesion, they prove the disease to be below the cortex, and out of the range of surgical interference. It might, also, in this connection, be well to remark that conjugate deviation of the eyes from the side paralyzed, or toward it, if there are convulsions, or much rigidity of limb is of no localizing significance.

II. The second condition calling for the use of the trephine is :

Cerebral Hemorrhage.—This is almost always due to the rupture of an artery—very rarely to that of a vein. Veins rupture chiefly under such extreme pressure as attends strangulation and under the same circumstances capillaries may give way and cause minute extravasation. In this case the trephine affords the only relief, and the effect is brilliant.

III. *Arterial Occlusion*—Two pathological processes may cause the occlusion of thrombosis—the former, of course, being a plug from a distant source arrested where the artery is narrower than the plug—the latter being a clot formed in the artery by coagulation of the blood at the spot obstructed. Both of these are relieved by trephining.

IV. *Abscess of the Brain.*—This, of course, is usually due to injury to the brain, but may and does often occur from adjacent suppuration, especially bone disease, or to suppuration at a distance, generally in the lungs. General pyemia, disease of the ear, orbit, or nose may produce it, and any one of these causes will prove rapidly fatal if the trephine is not early applied.

V. *Cephalalgia.*—This is, by far, the most common of cephalic troubles calling for the use of the trephine. The indefiniteness of the term cephalalgia is the very point upon which I desire to turn the purpose of this article ; *i. e.*, it is not all necessary to determine the exact point of lesion, inflammation, or traumatism before deciding to plant the trephine ; but to this we shall refer later on.

VI. *Traumatism.*—It is hardly necessary to state in a concisely written paper of this character that the skull should be trephined over the point of injury even in suspected fracture.

VII. *Epilepsy.*—In all the range of surgical therapeutics there is nothing which gives such satisfaction as the use of the trephine in epilepsy. I have rarely seen a case in which it was contra-indicated.

I shall now proceed to mark out all that is practically known about the localization of disease or injury for the purpose of trephining. The symptoms produced by brain lesions of course vary with the locality of brain structure, and it is only by such pathological expression that we can a *posteriori* determine the seat of injury or disease.

I shall endeavor to arrange these in a concise tabular form so that they may be referred to without wading through the great marshes of cerebral technology.

I. *Prefrontal lobe.*—The parts of the ascending frontal are rarely attended with

motor or sensory symptoms. Insanity is more frequent from lesions here than in any other locality. There is one prominent exception to the above rule, and that is the distinct motor aphasia which invariably points to lesion around the anterior limb of the fissure of Sylvius.

II. *Central area*.—In this area (composed of the ascending frontal, ascending parietal, and superior parietal) lesions cause motor paralysis as follows:

Lesion in upper third—loss of power in leg. Middle third—loss of power in the arm. Upper half of lower third—loss of power in face. Lower part of ascending frontal—loss of power in lips and tongue, and when on left side, aphasia.

III. *Parietal lobe*.—Symptoms not well differentiated. Lesion recognized generally by the vagueness of expression. Among the symptoms which have been remarked are hemianesthesia, hemiplegia, defects of speech, amblyopia of the crossed variety, and more distinctively than all else, word blindness.

IV. *Occipital lobe*.—Hemiopia.

These brain areas are all that come under the range of surgical relief.

In conclusion let me say that the trephine does less harm and more good than any surgical instrument. Fear of not localizing a lesion should not deter the surgeon from operating.

Thyroid Gland.

WHITEHEAD (*Lancet*) thus briefly describes the gross structure of the thyroid gland:

It consists of two lateral lobes, one on each side of the trachea, connected by a transverse portion called the isthmus, which passes in front of the second and third cartilages of the trachea, to which it is attached by a firm layer of fascia. Sometimes the gland is supple-

mented by a third lobe situated on the left side of the upper part of the isthmus, and again, less frequently, a lobe exists which passes behind the trachea and in front of the œsophagus. These supernumerary thyroids are much more frequently found in dogs than in man. They vary in size from that of a millet seed to that of a filbert. Although the normal thyroid only weighs about two ounces, the vascular supply is very great. It has been estimated that the sum of the sectional area of the thyroid arteries is more than half that of the cerebral arteries, and the arteries during disease have been found augmented to a third of an inch in diameter. It is surrounded by a fibrous capsule, from the inner surface of which are derived trabeculæ of connective tissue penetrating into the interior of the mass and forming the stroma of large alveolar spaces, which are abundantly supplied with blood vessels and lymphatics. The acini are lined with epithelium which secrete from the blood a glairy fluid which is reabsorbed in health by the lymphatics.

Dr. Hale White, after an examination of forty thyroids, says that the size is very variable, being, as a rule, smaller in adults over fifty than in those under that age. Its shape also is inconstant. The vesicles average one twenty-fifth of an inch in diameter. The more distended the vesicle, the flatter its epithelium, and the less the connective tissue between the vesicles. Parenchymatous cells, leucocytes and red blood corpuscles can all immigrate into the vesicles and there, together with perhaps the epithelial cells, form a granular débris. Indentations on the edge of the colloid matter and holes in its substance are due to the invasion of parenchymatous cells and possibly other cells. Sometimes

the colloid matter has a double contour, and at times contains oxalate of lime and cholesterine crystals. None of these changes can be associated with any particular disease. The amount of connective tissue is variable.—*N. Y. Medical Journal.*

Cannabis Sativa in Exophthalmic Goitre.

PROFESSOR VALIERI, of Naples (cited in the *Bull. Gén. de Thérap.*), mentions three cases of exophthalmic goitre in women, one of whom was admitted into a hospital for incurables on the 12th of June, 1884, and was discharged completely cured on the 19th of the following September. All three of the patients had exhausted the list of ordinary remedies, and only the hemp benefited them. The author says that *Cannabis sativa* must be used in doses twice as large as those of *Cannabis indica*. The most active preparations are the resin, or cannabin, obtained by Gastinet's process, the tincture, and the dried herb in the form of pastilles, tincture, or fumigation. The extracts and aqueous extracts of the shops, made from the fresh herb, are inferior. He gives four grains and a half of Gastinet's cannabin, mixed with sugar of milk, in twenty-four hours.—*N. Y. Med. Jour.*

Peculiar Ossification of the Occipital Bone.

DR. CAMPBELL describes (*Glasgow Medical Journal*) a skull in which the tabular or supra-occipital portion of the occipital bone was divided into two almost equal portions by a suture extending between the two lateral angles immediately above the external occipital protuberance. The upper portion was again divided symmetrically into three distinct pieces, a median and two lateral of about equal size, and united by deep, finely serrated sutures. He thinks they were not large Wormian

bones because there were two small ones present in the lamdoidal suture, and, as the entire bone above the occipital protuberance was involved, the condition seemed to be rather an instance of the interparietal bone found in some of the lower animals, as the rodents, being represented in man. The explanation of the condition is to be looked for in the process of ossification of the supra-occipital portion of the occipital bone which commonly starts from four centres, two below in the cartilaginous base of the skull and two above in membrane, so that probably in the present case the two centres below formed in the cartilage fused and remain distinct from the centres above formed in membrane, of which it is likely there were four, two uniting to form the central piece and remaining distinct from the one on each side, forming the separate pieces of bone.—*N. Y. Medical Journal.*

Pulmonary Gangrene Treated by Incision and Drainage.

AT a meeting of the Clinical Society of London, Dr. PASTEUR read a case of "Pulmonary Gangrene treated by Incision and Drainage." (*Lancet.*) The patient was a delicate looking boy, aged 7. His illness was insidious in the onset, but had developed rapidly. On the morning before admission to the North-Eastern Hospital for children, he coughed up a quantity of bright blood, and his mother noticed that his breath had become very offensive. On admission ten days after the onset, he was febrile, with thickly coated tongue, quickened breathing, and gangrenous fetor of breath. Over the right upper lobe were impaired resonance, weak tubular breath sounds, and diminished voice conduction. During the next three weeks cavity signs developed at the

right apex, and the remainder of the right lung became pneumonic. The temperature ranged between 100° and 103.6° . He spat up daily from two to four ounces of offensive watery fluid, mostly saliva. The boy was subsequently operated on by Mr. Pollard. The cavity was incised at the anterior extremity of the right second space, one inch from the sternum. Large quantities of gangrenous lung and putrid fluid were expelled through the wound. The cavity reached down to the sixth rib. A counter-opening was made in the sixth space, flanged tubes inserted, and a blue wool dressing applied. Next morning the child was much relieved, nearly free from cough, expectorating small quantities of frothy sputum almost free from odor, and practically free from pain, which had hitherto been a most distressing symptom. The cavity was washed out daily once or twice as occasion required. At the end of a week the washings deposited a copious sediment of pus. The improvement, however, was not maintained. The temperature, pulse, and respirations remained high, fetor of breath reappeared on the tenth day, and the patient sank rapidly three days later. A huge cavity occupied the anterior third of the right lung. It was lined for the most part with a thin layer of granulation tissue. At the inner margin the necrotic process had invaded the pericardium and set up acute pericarditis. The œsophagus was firmly adherent to the right bronchus, and a narrow sinus, about three quarters of an inch long, led from a minute valve-like opening in the œsophagus to a small ragged opening in one of the main divisions of the right bronchus. There were no signs of tubercle or of caseating or suppurating bronchial glands. The gangrene was undoubtedly due to the passage from the œsophagus into the lung of

some irritative material (probably decomposing food-stuffs) along the sinus above mentioned. Whether this sinus was the remains of a glandular abscess or was caused by the passage of some pointed foreign body from the œsophagus was doubtful. The limitation of the gangrene of the anterior region of the lung, and the implication of all three lobes in a single cavity, were worthy of notice. Pericarditis appeared to be a rare complication of pulmonary gangrene. The indications for surgical interference were sufficiently clear,—viz., imperfect communication of the gangrenous area with the bronchi, failure of expectant treatment, and signs of a cavity in an accessible situation. The amount of repair which took place under unfavorable circumstances was very encouraging. An earlier operation might have saved the life of the patient. —*Therapeutic Gazette.*

Rest in the Treatment of Chronic Joint Disease.

DR. J. RIDLON (*Medical Record*):

As applied to a joint, whose normal functions are motion and resistance to pressure, rest means a cessation from, or absence of, motion and pressure between the articular surfaces. We accomplish this by fixation or immobilization of those parts capable in any degree of producing intra-articular motion by the removal of the superincumbent weight, and by the counteraction of muscular spasm.

Rest, in the treatment of chronic joint disease, does not necessarily imply rest in bed; nor does it imply a deprivation of sunlight and pure air; neither does the removal of the superincumbent weight necessarily imply the use of axillary crutches; nor the counteraction of muscular spasm imply the use of elastic traction.

In 1855 the so-called "American method" of treating chronic joint disease was devised by Henry G. Davis. It consisted of a portative apparatus, designed to give elastic traction and at the same time allow of free motion at the joint, or as it has been called, "motion without friction."

Davis said: "By this means we also get passive motion without friction."

C. F. Taylor (1873) says: "Motion without pressure is not only not injurious, but is highly beneficial."

L. A. Sayre (1883) says: "Motion is as essential to retaining a healthy condition of the structure about a joint as light is essential to retaining a healthy condition of the eye."

Taylor no longer believes in the desirability of motion without pressure while the inflammation is acute and progressive, using fixation with counter-extension in such cases.

Sayre [in the author's opinion] treats the ankle, knee and spine with the aim to secure immobilization, and at the hip secures by his apparatus a partial immobilization.

Judson aims at fixation and the removal of the superincumbent weight.

Willard believes in "fixation and rest."

H. O. Thomas teaches "enforced, uninterrupted and prolonged rest."

All the more recent writers on the subject, H. A. Reeves (1885), Edmund Owen (1885), H. W. Page (Treves Surgery, 1886), Howard Marsh (1886), C. N. Macnamara (1887), G. A. Wright (1887), Robert Jones (1888), and V. P. Gibney (1888), agree upon the importance of immobilization, either with or without traction.

In recapitulation the author says:

The theory of motion in the treatment of chronic joint disease was the result of the old fear of ankylosis;

but we have not found recorded an authentic case of ankylosis due to the immobilization of a tubercular joint.

Motion with traction followed necessarily, because no patient could endure motion without traction, unless anesthetized.

A portative apparatus became a necessity, because patients treated by motion with traction died, unless they had the benefit of good air and sunlight.

The results of the use of the Davis and Sayre splints, or modifications of them, which are claimed as allowing motion, have not been published, although they have, in some form, been in use for thirty-three years.

Motion, as a factor of the treatment of disease of the joints other than the hip, has been universally abandoned; and there appears no good reason why it should be continued at the hip, or in tubercular synovitis of the knee.

Motion without friction between joint surfaces is obviously a mechanical impossibility.

The Taylor and Judson splints came to take the place of the Davis and Sayre splints because they permitted less motion at the hip joint.

The results of the use of the Taylor splint as a portative apparatus leave much to be desired. It does not prevent rigidity, flexion, abduction, adduction and shortening, either from erosion or subluxation.

All long traction splints of which we have cognizance give interrupted instead of "continuous" traction during locomotion; and interrupted traction, while muscular spasm exists, implies motion.

Continuous traction can only be maintained by them by placing the patient in bed, or upon a patten (under the well leg) sufficiently high to prevent

either the foot or the splint from reaching the ground. In practice this is not done.

All short splints that depend upon adhesive plaster, as other similar means for tractive power, fail to prevent intra-articular pressure and motion during locomotion, unless crutches and a high patten be used.

Continuous, uninterrupted traction relieves pain and aids the correction of the deformity in very many cases. In a few cases, however, it causes pain and muscular spasms; and there is much evidence that it can be dispensed with in all cases, provided fixation and removal of superincumbent weight be efficient.

Fixation is necessary in all cases; it must be continued without interruption until the inflammatory process has subsided; and the more perfect the immobilization the quicker and better the result.

Removal of superincumbent weight must be absolute from the beginning of treatment until end of convalescence.

Thomas' splints, for the hip, knee and ankle, are the most effective known to the author for inducing fixation. Many, however, have failed in using them, because they have caused their patients to walk about before the muscular spasm had subsided, because they frequently removed them to "test motion," and because they failed to use a patten sufficiently high (four to six inches).

The use of efficient fixative apparatus combined with a longer or shorter period of rest in the horizontal position absolutely insures a cure, without other deformity than shortening in all joints except the spine; and in the spine it insures against any increase in the curvature, and a diminution and absolute reduction of the curve in very many

cases, and, not infrequently, freedom from rigidity.

We are inclined to think that the dangers to the general health from confinement to the horizontal position have been exaggerated, and depend upon unfounded assertion and observation of cases treated without or with but imperfect fixation.

In cases of hip disease, after a cure has been effected and the fixative apparatus removed, we favor the use of a modification of Dr. Taylor's Dows-splint, as more convenient and safer for young children than the crutches and patten.—*Analectic*.

VENEREAL DISEASES.

Capillary Aspiration of the Bladder.

THIS was one of the subjects brought before the Society of Naturalists, at Cologne, by Drs. ROSENBERGER, of Würzburg, and ENGLISH, of Vienna. The first speaker remarked it was a procedure warmly recommended by Lücke, and he wondered that it was so little practised. The operation was easily performed. Any kind of aspirator could be used, and a fine needle no thicker than an ordinary knitting-needle passed into the bladder above the symphysis in the linea alba. When all the fluid was evacuated the canula should be removed with a sudden jerk. By this means no bleeding took place, especially if care was taken to keep the sides of the canal together until they adhered. Of course all antiseptic precautions should be made use of. In old people it was sometimes necessary and frequently useful. It often happened that when aspiration had been performed two or three times the patient could micturate naturally, or a catheter could be introduced, when before such a thing was impossible. It was a procedure generally indicated in

retention of a passing character, and when catheterization set up violent hemorrhage from the urethra. The pain from the operation was slight, frequently less than was caused by introduction of a catheter. Dr. English, of Vienna, said he had never practised capillary aspiration of the bladder, and criticized the procedure adversely as both unnecessary and dangerous.—*Medical Press and Circular*.

Gonorrheal Infection of the Mouth.

DR. CONDUCT W. CUTLER reports a case of this kind in the *New York Medical Journal*. Miss J. C., twenty-one years old, presented herself for treatment at the New York Dispensary, July 18, with the following history: Ten days previously, while under the influence of liquor, she yielded to the unnatural desire of a sailor, and had taken his penis several times into her mouth. The next morning her mouth felt raw and dry, and the saliva had a horrible taste. On the second day little sores made their appearance about the lips, and the condition of the mouth remained the same. On the third day the gums and tongue became swollen and painful, and on the fifth day the whole inside of the mouth was so intensely inflamed that she was unable to eat; and a whitish fluid, mixed with blood, having a nasty odor and taste, was secreted. This continued until the pain and inability to eat compelled her to seek medical advice at the dispensary. On examination, the lips were found cracked and covered with herpes in all stages of development. The mucous membrane of the lips and cheeks was thickened, reddened, denuded of epithelium in places; and, in small areas, covered with a false membrane, which was easily detached, leaving an excoriated surface.

The gums were swollen and retracted from the teeth, bleeding readily upon pressure. The tongue was swollen, very tender on touch or pressure, and could be but slightly protruded, and then only with great pain and effort. The surface was red and glazed in appearance, with small superficial ulcers here and there, secreting a thick yellowish pus. The soft palate and anterior pillar of the fauces presented an inflamed appearance, but beyond the parts seemed to be in a normal condition. The breath was extremely offensive, although there was but little salivation. The secretion from the mouth consisted principally of mucus, pus-cells, and epithelium, and large numbers of bacteria. The false membrane contained micro-organisms resembling the gonococcus, but their identity was not fully established.

The sailor freely admitted that he had been suffering from a severe attack of gonorrhea, and, not wishing to infect the girl, had entreated her to comply with his unnatural demands. She had yielded to his wishes, and become affected with a purulent stomatitis, probably gonorrheal in character.

The symptoms were greatly relieved with the local application of glycerine and bismuth subnitrate, together with a mouth wash of chlorate of potassium; but the patient disappeared from under observation before cure was complete.

Pyæmia as a Direct Sequel of Gonorrhea.

DR. ROSWELL PARK (*Journal Cutaneous and Genito-Urinary Diseases*):

A man of 19, came to me with the following history: About a month previously he had contracted a gonorrhea of ordinary severity, and after continuing for two weeks the discharge had nearly ceased. A few days after that his knee joints began to swell, and he was treated for some days for gonorrheal rheuma-

tism, by a physician outside of the hospital, but his symptoms becoming worse and his general condition somewhat alarming, he was sent to the hospital.

On admission his left knee joint was found very much swollen, fluctuating, the swelling extending up the thigh, but the joint not being very painful. In the right knee considerable pain was complained of and there was some distension, but no such amount of swelling as in the other. His general condition was what is generally spoken of as typhoidal, his evening temperature high without marked remissions. From the above date his typhoid symptoms increased in severity; his left knee enlarged still further, and when tapped with an aspirating needle gave a quantity of cloudy serum, in which, under the microscope, a few pus cells were observed. The decubitus became more and more marked, he was delirious at night, his temperature ranged higher, his tongue became dry and brown, sordes collected on the teeth and lips, and he steadily sank with more and more marked symptoms of sepsis. The 2d of October it was observed that he had paresis of the right arm and superficial ulcers of both corneæ; his sphincters were relaxed and subsultus was noted. He was delirious, and from this condition he gradually sank and died.

As his septic symptoms became more and more prominent, he made less and less complaint of his painful knees, even their tenderness and sensitiveness on handling largely disappearing. The discharge from which he originally suffered did not reappear, and on admission to the hospital, his general condition being so serious, but little attention was paid to his local trouble. His treatment consisted of the best stimulant and tonic measures which could be instituted, and the only one of his joints which seemed

to call for special attention was his left knee, which, as above remarked, was aspirated for the relief of the distension.

A post-mortem examination was made eight hours after death. There were slight evidences of leptomeningitis, and there was acute hydrocephalus internus. There were no thrombi in the sinuses of the brain; the musculature was pale, and there was but little subcutaneous fat. On opening the chest there was found that which was not discovered during life, a collection of pus in the left sterno-clavicular articulation, with carious erosion of the articular surface of the sternum. This abscess contained half an ounce of pus and detritus, and had burrowed posteriorly into the tissues behind the joint; in several of the other joints pus was also discovered, and both knees were filled with pus and debris which had burrowed up posteriorly destroying the synovial membrane, and working in among the hamstring muscles, had denuded the posterior surfaces of the lower ends of both femurs of their periosteum. The cartilages, however, were but slightly affected, and the joints presented but very little apparent enlargement. The heart substance was pale, soft and anæmic; there were adhesions between the right lung and the chest wall; the lungs were œdematous but in other respects normal; the spleen was enlarged and much degenerated; the stomach contained grumous fluid and showed numerous fine disseminated hemorrhages under the mucous membrane. The mesenteric glands were enlarged; the small intestine was studded with very fine tuberculous nodules, almost miliary in size, and displayed the same minute hemorrhages as did the stomach; the bladder was normal; the urethra was a little thickened, but showed no other microscopic traces of recent inflammation. The iliac

veins contained no thrombi. The original urethral discharge was not examined for gonococci.

The author has repeatedly found gonococci in the synovial exudations of gonorrheal rheumatism, but never has he found any distinctive pus cells. He says: The gonococcus itself is cultivated with great difficulty, and I have never been able to get a pure culture of it, or one with which I could work with any satisfaction; but I have time and again made cultures from the pus discharged in cases of gonorrhea of all degrees of severity, from the freshest to the oldest, without reference to the gonococcus, and have invariably succeeded in finding one or more forms of the common pyogenic bacteria, such as *staphylococcus albus* and *aureus*.

The part played by these organisms in the production of septicæmia and pyæmia is now pretty well understood. We have only to suppose that which we know does in many cases occur—that is a phlebitis either in the neighborhood of the urethra or the prostatic plexus. Once this phlebitis has been aroused, the circumstances in no wise differ from those attending any case of pyæmia, except so far as concerns the mere accident of location. Minute thrombiform, become infected, and are distributed all over the body, manifesting a peculiar preference for the synovial membranes.

Many observers have noticed cases of peritonitis following gonorrhea; as to these, almost almost all of them have occurred in the female sex, and are easily explained by migration of the specific processes along the tubes to the peritoneum. The cases of endocarditis or of pericarditis are hard to explain; whether they may be ascribed to the specific gonococcus, or whether they come about after a manner similar to that which I have suggested in the

above case, cannot at present be decided. Practically it is found that septic symptoms are very rare when the primary trouble is confined to the anterior urethra; the farther it extends back, the greater the possible danger.

Hydrocele:

PROFESSOR FORBES uses as an injection after evacuating the fluid in hydrocele, a solution composed of tinct. of iodine $\frac{1}{3}$ – $\frac{1}{2}$ and sherry wine $\frac{1}{2}$ – $\frac{2}{3}$. By injecting a considerable quantity it comes in contact with all parts of the sac, more certainly occluding it; the excess may be allowed to flow out through the canula.—*Coll. and Clin. Record.*

DISEASES OF THE SKIN.

Removal of Tattoo-Marks.

THE removal of tattoo-marks has always been considered a very difficult feat. Many methods have been recommended at various times, a pretty sure sign that none of them is very satisfactory. Dr. G. VARIOT, of the Paris Biological Society, has recently proposed a new process, which he declares to be invariably successful in removing blue and red tattoo-marks. Without hazarding an opinion beforehand, one must admit that the method is based on apparently sound principles. But it is, perhaps, well here to remark that Dr. Variot is attached to the central infirmary of the Paris prisons, and therefore in excellent position to experiment with such disfigurements, since, for some inscrutable reason, criminals, who have most to fear from identification, are just the men who most often brand their persons with indelible marks. Dr. Variot operates as follows: The tattooed parts are first wet with a concentrated solution of tannin, and with a set of tattooing needles the skin is punctured all over the colored portions to a depth

usually adopted by professionals. All the parts tattooed with tannin are next rubbed over with the lunar caustic pencil, the silver salt being allowed to act upon the epidermis and derma until the needle pricks have turned a deep black. The excess of liquid being now wiped off, things are allowed to follow their natural course. The whole surface treated will soon turn black. The pain, quite moderate during the operation, continues to be slight for the first two days, and is accompanied with some local inflammation. After the third or fourth day no more pain is felt, and, except for large marks, no dressing will be necessary. After fourteen or eighteen days the eschar will fall off and leave, instead of the tattoo-marks, a reddish superficial cicatrix, which will gradually turn paler, and, after two months, almost disappear. On close scrutiny it will probably remain always perceptible, but it will otherwise be scarcely noticeable, and, at all events, the skin will show no trace of the former emblems, more or less artistic. In explanation of the remedy's mode of action, Dr. Variot thinks that the coloring matter forming the tattoo-marks is generally localized in the upper third of the derma, the deeper portions remaining unaffected. On tattooing at first with tannin, the solution penetrates exactly to the same depth as the foreign particles, and, acting as a mordant for the silver nitrate, enables the caustic solution to permeate the derma to the proper depth and no further. Hence the skin will preserve its elasticity, and the scar be so little apparent. Before finding out the foregoing process, others were unsuccessfully tried on prisoners, at their request, and it may not be useless here to briefly point out their imperfections. Blisters, even kept up some time, proved entirely insufficient.

They do not reach deep enough. Red hot iron was found unmanageable and dangerous, too short an application being useless, and too long a one leaving painful sores and ugly scars. As to tattooing with a number of blistering or caustic solutions, including silver nitrate, they were scarcely satisfactory, although coming nearer the mark. Their main fault was that they were exceedingly painful, even when the punctures were not deep enough. But when tannin was first applied, and then lunar caustic, the results were all that could be desired.—*Ther. Gazette.*

DISEASES OF THE EYE AND EAR.

Operation for Excision of Eye-Ball.

DR. COPPEZ, of St. John's Hospital, Brussels, publishes in the current number of *La Clinique*, details of a method of enucleation which he considers to be easier and simpler than the methods of Bonnet and of Tillaux now in use. The patient having been anæsthetised and the eyelids separated by a speculum, a thread is passed transversely through the cornea by means of a curved needle; the ends of the thread are knotted and the loop held in the left hand. By traction on this loop the eye is drawn slightly forward, and with a curved scissors the conjunctiva is divided close to the corneal edge. The subconjunctival tissue is then torn through, and the tendons of the recti muscles come into view and are divided, next the tendons of the oblique muscles, and finally the optic nerve. Dr. Coppez claims for his operation that it may be practised with fewer instruments—a curved needle, scissors, and a speculum; that the optic nerve may be divided more directly and at a greater depth in the orbit, which in the case of malignant tumors is of great importance; and that the consequent hemorrhage is less

considerable than in the ordinary operation. The only objection to it, he thinks, is that the globe might be rendered flaccid by the escape of the aqueous humor through the needle holes; but that is of little importance.—*Lancet*.—*New York Medical Journal*.

Operation for Removal of the Eye-Ball.

DR. SYDNEY STEPHENSON thus describes Professor Mules' operation in a recent number of the *Hospital Gazette*:

1. An incision is to be made with a narrow bladed knife, all round the periphery of the cornea at junction with the sclerotic, and the entire cornea removed. The inner and outer extremities of the wound are to be shaped so that when the wound is sutured the incision will lie evenly.

2. With a scoop, or other convenient instrument, the contents of the globe are to be removed. The greatest care must be taken to leave no trace of choroid or other internal structure behind. The internal surface of the sclerotic coat should be left white and glistening.

3. Bleeding must be checked by well irrigating the cavity with either cold or very hot 1 to 4000 bichloride solution, and by pressure with small aseptic sponges.

4. When all bleeding has ceased, a glass sphere, of which several sizes are made, must be introduced into the scleral cavity. Mr. Mules has invented an ingenious instrument for this purpose, but if a sphere be used considerably smaller than the cavity—and this should always be done—difficulty is seldom met with.

5. The sclerotic, with its superincumbent conjunctiva, is united over the glass sphere by three or more silk sutures introduced vertically. Silver sutures should not be used for this pur-

pose, as they are difficult and painful to remove.

6. To prevent excessive reaction Mr. Mules burrows deeply with the point of a pair of scissors into the orbit at the outer side of the globe, and introduces a gold wire into the hole thus made.

7. All the parts are thoroughly syringed with 1 to 4000 bichloride solution, and iodoform is sprinkled over the wound. A dressing of salicylic ointment, spread on lint covered with cotton-wool, and a bandage, are then applied.

If all proceed satisfactorily, it is unnecessary to dress the eye for three days, and when dressing is needed the bichloride solution and iodoform should be used freely. The sutures may be removed when the wound has healed. Some pain and swelling of the conjunctiva, lids, and face may follow the operation, but in the course of a week or ten days, a perfect and very movable stump remains. An artificial eye may be fitted in from three to four weeks after.

It has been urged as an objection to the operation that the glass ball might get broken in the orbit. Such an accident, which might undoubtedly occur, would be very serious, although, fortunately, no such accident has yet happened. Another and more serious objection is, that a foreign body is introduced into the eye; and there is no certainty that it will always remain innocuous. It is true the operation is a favorite one with several excellent English ophthalmic surgeons, yet it is one that cannot be recommended until a long experience has proved its safety. The loss of the second eye, and consequent total blindness, which might possibly result from sympathetic disturbance, could not be compensated for by the improved appearance of the glass substitute for the eviscerated organ.

THE AMERICAN MEDICAL DIGEST.

PART III.

Diseases of Women and Children
and Obstetrics.

THE AMERICAN MEDICAL DIGEST.

1889.

DISEASES OF WOMEN AND CHILDREN, AND OBSTETRICS.

DISEASES OF WOMEN.

The Importance of the Microscope in the Treatment of Sterility in Women.

DR. H. MARION-SIMS, of New York, in this paper remarked that the gynecologist was consulted more frequently for sterility than on account of any other symptom. Simpson affirmed that one marriage in eight was unfruitful. Impotence in both the male and the female might be either real or apparent. In the male it might be congenital or acquired; spermatozoa might be absent in consequence of disease, especially gonorrhœa with accompanying orchitis. In deciding upon the cause of sterility in a given case, we should ascertain if both the male and the female were competent to have connection, if the spermatic fluid contained zoosperms, and if they lived after being deposited in the vagina. In order to determine the latter point a drop of semen was examined microscopically soon after coition.

Sterility was sometimes curable and sometimes not. If it was shown that the male was healthy, the female should be examined with a view to determin-

ing if there was any obstacle to the passage of the semen into the uterus. With regard to the physiology of ovulation, it was probable that the ovum was fructified in the Fallopian tube. Spermatozoa had been found alive in the tube, and even at the fimbriated extremity, within ten hours after copulation. If there was any obstruction to the passage of the ovum into the uterus, sterility would result, as in constriction or torsion of the tubes by pelvic adhesions. Any marked and permanent uterine displacement would interfere with conception. Disease of the endometrium and tumors were also causes. The os tincæ might be so small that the spermatozoa could not enter the uterus; in that case it should be dilated according to one of the usual methods. In cases of acute cervical antelexion, incision was the best treatment; the reader had never seen an accident follow this operation, while sterility had frequently been cured. Many gynecologists failed to accomplish the desired result, because they did not treat the patient after the operation, so as to remove from the cervical canal the abnormal secretion that killed

the spermatozoa. The cervical mucous should be translucent. A drop should be removed a few hours after intercourse and examined with the microscope; this was best done by means of a curved glass tube attached by rubber tubing to a uterine syringe. If the spermatozoa were found in a dead or dying condition, the secretion must be in an abnormal condition, and hence the endometrium must be diseased. At the same time the general health of the patient might be perfect. Sometimes the insertion of a properly fitting pessary was enough to insure conception; again, the treatment might consist in curetting or in intra-uterine applications and the introduction of boroglyceride tampons. In any case the patient must not be dismissed as cured until the cervical mucous was restored to a healthy condition, as evidenced by the fact that live zoosperms could be found in it from twelve to twenty-four hours after intercourse. The reader cited a case in which sterility persisted for ten years after an abortion, due to the persistence of an unhealthy discharge from the uterus, and was cured by appropriate treatment.

Dr. Barker said that conception might occur after the limit which was usually assigned, but that in his experience the case of Sara, Abraham's wife, was the only authentic one in which it had taken place after the age of fifty-five. In 1852 he had attended a lady, aged 52, who was in labor for the first time, and had delivered her by version of a living child; ten months later she had a premature labor, and fourteen months after this she again became pregnant. She was now in good health at the age of ninety. Sir James Simpson had affirmed that women who married late in life seldom conceived; the

speaker questioned the truth of this statement.

Dr. Hunter had found that more patients conceived after gradual than after forcible dilatation of the cervix.

Dr. Wilson agreed with the author that division of the cervix for the cure of sterility must be followed by treatment directed to the diseased endometrium.

Dr. A. W. Johnstone, of Danville, Ky., called attention to the fact that in the case of the infantile uterus the microscope would afford no aid in the recognition of the true cause of sterility. This condition of the uterus was probably due to disease of the sympathetic nerve system, which was incurable. In such cases, where menstruation was scanty and irregular, sterility was absolute.—*N. Y. Med. Journal.*

Tuberculous Ulceration of the Vulva.

DR. M. ZWEIFBAUM, of Warshan, records a case of this rare manifestation of tuberculosis, in the *Berliner Klin. Wochenschrift*:

The patient came under his observation in 1885, but the year before had been treated for fungous ulceration of the vaginal portion of the uterus. Paquelin's cautery was used, and the patient was discharged "cured." She was 32 years old, and had had five children.

On admission under Dr. Zweigbaum's care there was a deep, and painful ulcer just within the left posterior vaginal wall forming a cavity an inch and a half long and an inch deep, together with cauliflower excrescences of the portio vaginalis. The left labium minus was almost destroyed by ulceration, and microscopic examination of a portion revealed abundant tubercle-bacilli. The apex of the right lung showed obscure signs of phthisis on auscultation and percussion. The spleen was somewhat

enlarged, and the patient was feverish. In five months death ensued from exhaustion, the lungs having shown further alterations. There had been purulent expectoration, and towards the end œdema of the lower limbs. Syphilis was positively excluded in this case, which was examined by several colleagues.

Dr. Zweigbaum has carefully examined the literature of the subject, and finds only two cases (Deschamps, Chiari) of tuberculous ulceration of the vulva recorded. Taking into account the vagina and cervix uteri, twenty-nine cases of primary disease are recorded by various observers, and a short synopsis of each case is here given.

The disease is by no means rare in the course of general tuberculosis, but is rare when primary. Cohnheim gives one case, Fernet four cases, of infection by coitus. Others are ascribed to examinations, syringing by nurses who are tuberculous or much in contact with tuberculous patients. Numerous cases are recorded as having occurred immediately *post partum*. Intercourse with phthisical patients appears also to be more or less dangerous; for example, by the use of the same bedclothes, closets, or baths. Autoinfection may also occur from the sputa or fæces, and thus a secondary tuberculosis may be set up.

Frerichs disputes the possibility of infection from without, and argues that it takes place by conduction from the Fallopian tubes, more rarely the uterus. The stages successfully occupied by infectious material are very difficult to make out, because each organ or part successively traversed may show no trace of the virus afterwards, the nidus being unsuitable. We do not yet know the conditions which favor the establishment of the tuberculous process in a particular part. It is probable that certain

pathological processes induce a predisposition for tuberculosis, as in the lungs.

Thus comments Dr. Zweigbaum on his case, which teaches us above all the value of cleanliness, or rather the great dangers which attend its absence.—*Therapeutic Gazette*.

One-Child Sterility.

OUT of 1081 gynæcological cases Dr. KLEINWÄCHTER, in *London Medical Recorder*, noted ninety where the patients had borne one child at a more or less distant period, and had remained sterile since, although still cohabiting with their husbands. In twenty-one of the cases the single pregnancy had ended before term. He divided the causes of this kind of barrenness into ten groups: 1. Sequelæ of inflammatory processes beginning during the puerperium. 2. Catarrhal endometritis. 3. Sequelæ of inflammatory processes traced to a non-puerperal origin. 4. Displacements of the uterus. 5. New growths in the uterus. 6. Constitutional sources of sterility established after the first pregnancy. 7. Impaired potency of the husband. 8. Excessive involution or atrophy of the uterus. 9. New growths in the ovary. 10. Uncertain or unknown causes. These groups are arranged in order of frequency. Forty-three were traced to uterine and extra-uterine pelvic inflammations; that is, to the first three groups; nineteen to displacements and tumors. Dr. Kleinwächter admitted that the causes grouped above as 2 and 4 were not proved in every case to be uncomplicated.

He declared that the seven cases making up group 7 were well authenticated by the clinical history, the condition in question appearing to act in a positively deleterious manner on the genital apparatus of the woman. Under

group 6 were included cases where anæmia, cachexia, obesity or emaciation arose after the first pregnancy.

Phimosis in the Female.

Dr. M. J. BLEIM, (*Medical Era*):

There is a condition, extremely common, and in many cases undoubtedly prolific of local and reflex disturbances, which I have never seen mentioned in any of the familiar text-books and works of reference. The condition to which I refer is similar to that so well known in the male, called phimosis.

If we will examine a normal clitoris we shall see that the hood or prepuce is perfectly free from the glands, and can be retracted without difficulty, so as to expose the whole glans and the groove at its base. In many cases (and these are abnormal) it is impossible to do this, because the prepuce is adherent to the surface of the glans. Sometimes only the tip can be exposed, but more often the adhesion exists only over the distal half. You will find it almost impossible to break up this adhesion without the aid of an anæsthetic, and it is best done as a part of complete orificial work; even cocaine fails often to overcome this sensitiveness sufficiently. On peeling back the prepuce we usually find smegma confined in the groove and the affected surfaces highly inflamed and irritable.

More rarely than the simple adhesion we find the prepuce tense or shortened laterally, thus binding down the pressing upon the glans. To correct this condition it is necessary to incise the hood up the centre or to stretch it. If large, it may be advisable to take stitches, and, if too redundant, even to amputate a portion of the prepuce.

And now, a word as to the effects produced by this female phimosis. That it may exist in many women with-

out ever giving rise to any local or reflex disturbances I do not deny. That it may prove a possible cause of such troubles I affirm; and as a known abnormal condition its correction is always justifiable. The principal local irritation which I have observed is sexual excitation. Who knows but what this condition may not, in many cases, be the direct cause of masturbation? That it keeps up a constant irritation of the sexual function, whose craving for satisfaction ends in masturbation, I am positive. A fine illustrative case was the one which first led my attention to this matter. While assisting Dr. Wells LeFevre in performing an operation I noticed a very marked tension of the prepuce, plainly pressing upon and binding down the glans. I called his attention to it, and we discussed the propriety of correcting the condition. But in view of our ignorance, we decided to wait. The girl improved in many ways, but finally told the doctor what she had never confessed to him before—that she was troubled with excessive sexual excitement, which at times became so intense as to lead to masturbation; she was a good girl, and this trouble mortified her terribly. Thereupon the doctor incised the prepuce and broke up the adhesion. The relief was instantaneous and to us a revelation. It resulted in the immediate disappearance of all sexual irritation and of masturbation. The Germans, with their penchant for curing all ills with the knife, have indeed practiced amputation of the clitoris for that vile habit. This is, however, a very radical thing to do, and the success has been so indifferent that the procedure is not well established. In those cases where relief has been obtained by this measure, I am of the opinion that the exciting

cause was a local one, and could have been cured by attending to the condition of the prepuce, as well as to all the lower orifices. In unsuccessful cases we must seek for the exciting causes in the higher mental and moral spheres.

Aside from local irritation this condition of phimosis may certainly operate by way of reflex disturbances, keeping up an irritation of the whole nervous system and a consequent drain upon it. In short, may we not look for the same range of effects as have already so well been determined in the male sex? May we not hope to find here an additional key to the source of some obscure nervous disturbances in young girls and women?

Galvanic Treatment of Fibro-Myomata.

DR. A. H. BUCKMASTER, in his prize essay recently published in the *Brooklyn Medical Journal*, makes the following valuable statements on the battery used and the method of applying electricity.

The Battery.—It is foreign to my purpose to discuss the relative merits of the many different batteries in the market. A good battery should be constant in its action; if it is not so, there will be marked variations in the current. This is apt particularly to occur when working with high intensities, and it is caused by the decomposing fluid in the cell preventing its efficient action, both by covering the elements and causing a counter-current. I have used the Law cell with satisfaction; and when I desired a current of forty milliamperes or under, Barrett's fifty-cell chloride of silver battery has proved itself entirely competent. It is necessary to have from seventy-five to one hundred and fifty cells to obtain a current of very high intensity.

For the past few months I have used a battery that I improvised. It is economical and effective. The ordinary wide mouth quart fruit jar is used. Several layers of thick pasteboard are cut so as to fit into the neck of the bottle, and more pasteboard covers so cut that they project slightly over the side of the glass rim at the mouth of the bottle. These are tacked together and perforated by means of a carpenter's chisel, so as to permit a carbon plate six inches by one and a half inches by one-quarter inch to be pushed through it. A perforated punch, No. 11, will make a hole that will allow the zinc element to pass through. The elements are submerged in a solution of chloride of ammonium, the connections made, and the battery is ready for use. To those to whom the expense of a battery is quite an object and who have some mechanical ability, it is not difficult to prepare, and it will work as well as any in the market. Its cost, if the materials are obtained at wholesale rates, is about \$15 per hundred cells.

Method of Application.—The patient is placed on a table with the clothes about the waist loose and so arranged that they can be readily pushed aside. The dispersing electrode is placed in a basin of very hot water and then adjusted to the abdominal wall. It is well to allow it to remain for as long a time as convenient before using the current, for the skin becomes a very much better conductor when soaked with water. The resistance of the horny layer of the skin is so great that Erb says all others need scarcely to be considered, and from this statement it will be seen that it is important to have it well soaked, as by this means alone its resistance is to a great degree overcome.

While a saline solution will overcome

its resistance much more effectively than simple warm water, the latter is to be preferred, as may be demonstrated by the following experiment: Allow a current as strong as comfortable to traverse any part of the body, using simple water to moisten the electrodes; lessen the current, and, after moistening the electrodes with the saline solution, increase the current to its maximum, consistent with comfort. It will then be found that the current's strength is much less than it was with simple water; and, as it is difficult to work with as much current strength as we desire in a number of cases without anæsthesia, on account of the pain to the patient, the disadvantage of the saline solution is apparent.

The rheostat and milliampèremeter should now be placed in the circuit and the uterine electrode fastened to the rheostat. The battery may be short circuited for a moment, and if one is not positive as to which is the negative terminal, place the bare terminations in a glass of water, and it will be distinguished by the greater number of bubbles collecting upon it. The rheostat should now be so placed that no current is permitted to pass. The uterine electrode may now be inserted. This is often the most difficult part of the treatment and requires the *tactus eruditus*. I usually do this on the back, but sometimes it is necessary to turn on the side, and then the patient gently turned over on the back. The current may be gradually increased until the patient feels pain. The strength of current that a patient is able to bear without pain varies greatly. In some cases the patient will bear one hundred milliampères, while in others it is impossible to go over thirty milliampères. One cause of pelvic pain is an overloaded condition of the bowels, and

particular attention should be given to have them empty. After the *séance* it is better for the patient to lie down for a short time. When the treatment is used for the purpose of checking hemorrhage, the patient should remain in bed and keep very quiet for forty-eight hours.

We are quite sure to have the good results obtained by a new method of treatment called to our attention before we learn of its casualties, and this is true of the subject under consideration. When using currents of great strength we are dealing with an agent capable of doing much harm. To those who are not specially familiar with the use of electricity it is almost impossible to conceive of a patient being able to bear with comfort a current, say of one hundred milliampères, that has been gradually increased, when to apply suddenly a current of less than thirty milliampères may occasion intense suffering. The ability to bear the current might not inaptly be compared to the ease with which one can pass over the ground on an express train; but the train starts very gradually and also decrease its speed gradually. Should it attain or discontinue its maximum speed abruptly, serious trouble would ensue. The importance of making secure connections in order to avoid abruptly breaking the current should be borne in mind. Stirring the connecting cords will at a times prove disagreeable, as will likewise shaking the table. Using the positive pole inside of the uterus may give rise to a stenosis, as occurred in a case that came to my notice. A nurse was permitted to give the treatment, and from the contracted condition of the canal it is presumed that she used the poles improperly. This illustrates the danger of indiscriminate use of this method. It should never be used

except by an expert. A current strong enough to throw a patient off a table by causing powerful muscular contractions, is one that is not to be trifled with, and a wet towel or any conducting substance that would switch suddenly a current of great strength through the heart or nervous centres, might prove fatal. In short, all the dangers have probably not yet illustrated themselves, and like any other new procedure we should be on our guard for danger signals.

Oleate of Zinc and Iodoform in Gynæcology.

DR. HASLAM has extolled the use of a mixture of the oleate of zinc in powder and of iodoform in gynæcology. The powder may be applied by insufflation or upon a tampon, as the case requires. In ulcerated cancer it lessens the pain and discharges and prevents the disagreeable odor. It is both an astringent and antiseptic application at the same time.—*La Gazette Médicale*.

Removal of Female Breast for Cancer.

PROFESSOR GROSS says: In the operation for removal of the female breast for cancer, the whole gland should be removed, and the axilla always opened and the involved glands removed (when possible). The axillary glands may be involved, and cannot always be detected.—*Coll. and Clin. Record*.

Carcinoma of Cervix Uteri.

WHEN carcinoma of cervix uteri has reached such a stage that it is unadvisable to operate, Professor Parvin advises the use of antiseptic injections, preferably a solution of permanganate of potassium, in the proportion of one dram of the salt to one pint of water, and used twice a day; for the hemorrhage use tampon and saturated solution

of alum, and at same time cotton root or ergot internally; for the pain give opium, and enough to subdue it.—*Coll. & Clin. Record*.

Electricity vs. Tait's Operations in Inflammation of the Uterine Appendages.

DR. G. T. HULBERT (*St. Louis Courier of Medicine*) concludes a long discussion thus:

1. That the cases in which Tait's operation is indicated are purely those in which inflammation, septic or specific is the active agent.

2. That the removal of this inflammation and its results with restoration of local and general tone is the problem to be solved.

3. That this accomplished, the functional activity remaining is no valid reason why the tubes and ovaries should be removed.

4. That in electricity we find the power of restoring such a high grade of nutrition that a recovery from the local expression of the disease is possible.

5. That the removal of the dead effete products, such as pus, is not possible and must be done by surgical methods (aspiration), but that neoplasm in any form will become absorbed and recovery ensue.

6. That electricity will not work alone but must receive legitimate assistance in the direction of maintaining the benefits of each application.

7. That the dominant idea in the treatment should be first the general effect of the remedy, catalysis, the polar effects, electrotonus. Second the polar effect, electrolysis.

8. That electricity should have a fair and intelligent trial before a resort to the knife be had.

9. That Tait's operation is justifiable only in those cases which electricity will not completely relieve.

DISEASES OF CHILDREN.

Summer Diarrhea.—Fever Mixture.

DR. ALFORD (*Medical World*):

In bowel troubles of children give :
 ℞. Acid carbolicæ, gr. vj; spirit lavand.
 comp., fl. unc. ss; aquæ puræ q. s. ad,
 fl. unc. ij. M. S.—Give one teaspoonful
 every hour, or after every movement of
 the bowels.

This dose may be given to infants of
 a few months, and to children of a year
 or more in age. Each teaspoonful con-
 tains one-fourth of carbolic acid, the
 active ingredient.

In your "Manual of Treatment," I
 see Professor Davis gives carbolic acid
 in some particular stage of the diarrhea
 in extremely small doses, the forty-fifth
 of a grain once in four to eight hours.
 As a germicide the acid is of no avail in
 this dose.

I always precede this treatment with
 calomel in doses of three to six grains,
 divided into six powders, combined with
 soda bicarb. and sugar, as the case de-
 mands. Astringents or opiates or castor
 oil may be given in the same prescrip-
 tion.

I wish to give you my favorite fever
 mixture—one that I have used for eight-
 teen years. It will often be found pre-
 ferable to the modern antipyrine and
 antifebrine. It is as follows: ℞. Tinct.
 aconit. rad., gtt. iv-xxvj; ext. verat. vir.,
 fl. gtt. xvj; spirit ether, nit., dr. ij-iv; syr.
 rhei arom. fl. unc. ss; syr. simp. vel aq.
 pur. ad., fl. unc. ij. Misce. Sig.—Give
 a teaspoonful every half hour, or two
 hours.

The quantity of veratrum may be in-
 creased, depending on the height of fever
 and arterial tension. I generally order
 a dose every fifteen or thirty minutes
 for four times, then once an hour until
 the patient sweats profusely, or the
 fever is decidedly abated. Under the

influence of this combination the tongue
 moistens and the secretions and excre-
 tions become stimulated to throw off
 the products of destructive combustion.

Antipyrin in Laryngismus Stridulus.

MR. MONTAGU PERCEVAL (*Lancet*)
 states that he has recently treated twenty-
 four cases of laryngismus stridulus
 with antipyrin, administering 2 grains
 every hour. In these cases, with one
 exception, the paroxysms were arrested;
 the case where this did not occur, in-
 creasing the dose to 5 grains also served
 to relieve the dyspnœa. Mr. Perceval,
 however, states that he likewise has
 used this remedy successfully in cases
 where an emetic dose of ipecac had
 failed.—*Therapeutic Gazette*.

Congenital Stricture, or Spasm of the
Urethra, as a Cause of Incontinence—
Its Cure by the Sound.

DR. C. W. EARLE, in a recent num-
 ber of the *Arch. Pediatrics*, cites the
 following case illustrating the value of
 treating incontinence of urine by the
 sound. This case, as well as the other
 cited by the doctor in his article, con-
 firms a short note published in the
 December number of this journal giving
 the experience of Dr. Clark, of Brooklyn,
 N. Y., in the treatment of this disease—
 a treatment which he has employed for
 many years:

J. J. H., a bright and smart fellow ;
 parents healthy. When about sixteen
 months old he was taken with heat in
 head and flushed face. At these times
 he would be fretful and uneasy. The
 mother would bathe his head, which
 would relieve him temporarily. At the
 same time she noticed that he had
 erections, but did not appreciate their
 significance. About one year follow-
 ing these symptoms he had some kind
 of a stoppage of water, which the

mother attempted to cure by domestic remedies, but failing, he was taken to a surgeon. Here he was treated for a period of two or three months, probably for adherent prepuce, but without relief. Another surgeon was consulted, who attempted therapeutical relief, with a like result. A general practitioner was the one next consulted. He frankly admitted that he failed to understand the case, but prescribed; no abatement of symptoms. Another gentleman of excellent reputation had him under treatment for three months. He claimed to thoroughly understand the case, but said little, and did no good. He was now taken to one of the oldest and most experienced men in this city, who declared his penis was all right, but gave medicine, with no improvement. Next a specialist on nervous diseases examined him, who, of course, pronounced it a disease of the nervous system, and assured the parents that the boy would certainly outgrow it. He looked up standard German and French authorities, and declared that there was not a parallel case on record. By this time the little fellow began to notice the erection of his penis, and would cry out: "It is stiff, it hurts; cut it off and put it in the fire." This and like expressions were frequently made, and he was in such a condition that but very little rest was obtained during the night. He would go to sleep for perhaps one hour, then quickly waken, nervous and trembling. Things were absolutely unbearable, and at this time, about April, 1886, he came under my care. I found the glans penis congested and purple on retraction, and operated. Following the ordinary operation for phimosis and adherent prepuce I passed a sound, and found, as I do in many cases, what appeared to be an obstruction from spasm of the cir-

cular fibres of the urethra. The sound was used a few times, and the boy gained in every possible respect. About the middle of 1887 I passed a No. 11 and found but little constriction. The past year has been one of enjoyment and freedom from nervous symptoms.

Epilepsy and Catarrh of the Duodenum in Children.

For a child *æt.* 2½ years, at the Jefferson clinic, with the milder form of epilepsy and catarrh of the duodenum, Dr. REX ordered 10 grs. phosphate of sodium t. d. and *R.* Potassii brom., gr. v. Sig.—Four times a day, in milk.

Where the iodide of iron is not well borne by children, Dr. Rex advises the following: *R.* Ferri pyrophosphat., gr. ij; potassii iodidi, gr. j; syr. limonis, gtt. xx; aquæ destillat., q. s. ad f 3 j. Sig.—May be given three or four times a day.—*Coll. and Clin. Record.*

Unilateral Chorea in Child.

For unilateral chorea in a child (*æt.* 12) at the Jefferson Hospital Clinic, Dr. STEWART prescribed three grains of antipyrine three times a day; it being soluble, and therefore more easily given to children than antifebrine in pill.

Antisepsis in New-Born Children.

THE extension of the antiseptic theory to all directions in which surgery has any bearing has long been recognized. Among new-born children the application of this theory has not been so extensive, as a means of treatment, as could be desired, though for many reasons the human organism is more than ever subject to the attack of septic diseases at this period. It is only necessary to reflect for a moment upon the possible injuries which a child may receive at birth to realize the importance of antisepsis. Especially subject to

septic diseases are the children who are brought to foundling asylums. Thus, at the Moscow Foundling Asylum, with the best care, the most scrupulous cleanliness, and the most thorough ventilation, there die every year from pyæmic processes from five hundred to nine hundred out of a total of sixteen thousand to seventeen thousand children who are received there yearly. In the month of February alone at this hospital forty per cent. of all the fatal cases are caused by pyæmia. During the other months of the year the mortality from this disease varies between fifteen and twenty-five per cent. of all the fatal cases. The causes of such an unfavorable state of affairs are believed to be the following :

1. Irrational treatment of the navel and the navel wound during the first day of life, is the most common cause of septic diseases.

2. The septic agent may gain access to the system, in addition to the avenue just referred to, by means of injuries to the scalp during labor, by ulcerations of the mucous membrane of the mouth, especially in case of aphthæ in atrophic infants, and by the anus. In some cases the gonorrheal virus appears to have excited inflammation in the folds of the navel.

3. A considerable number of cases of pyæmia are traceable to intra-uterine life, and are caused by transmission of the poison with the blood through the placenta.

For the avoidance of septic diseases in new-born children in general, therefore, the following rules are recommended :

1. With regard to the first category of cases of pyæmia, it is not generally in our power to prevent the septic infection of children during fetal life. Accoucheurs must be particular to enforce rigid

antiseptic conditions during the last days of pregnancy and during labor, this applying to attendants, clothing, instruments, the patient herself, and the accoucheur himself.

2. To avoid pyæmia in the new-born from a gangrenous or putrid condition of the navel, midwives must be carefully instructed as to proper care of the navel wound after the stump has fallen. The cord should be divided with scissors which have been made aseptic, perhaps by passing them through the flame of a spirit lamp. The ligature must be aseptic, the stump should be washed in a three or five per cent. solution of salicylic acid or boric acid, and then covered with absorbent cotton. One should endeavor to obtain mumification of the stump as soon as possible, and for that purpose only dry dressings are indicated. Should the navel suppurate either before or after the fall of the stump, it should be carefully washed with a weak solution of carbolic acid, dried, and then receive an application of a two-per-cent. solution of nitrate of silver. After this only antiseptic powders should be used.

3. Since gonorrheal virus appears to be responsible in some cases for inflammation of the navel, the latter may be avoided by using a two per cent. solution of nitrate of silver, the same as Crede has recommended for the eyes to prevent gonorrheal ophthalmia. In any case in which the mother has leucorrhea this application should be used without fail, for the eyes and for the navel.

4. Aphthæ are found in the mouths of almost all children in foundling asylums; some of them have it when they enter, and others get it after they have entered, for it is almost impossible to secure a careful cleansing of the mouth in every child in a hospital after each nursing. Not infrequently the wet

nurses who nurse two babies neglect to cleanse their infected nipples sufficiently and transmit the disease by this means from one baby to the other. The crowding of children in public institutions favors the extension of such diseases. In atrophic children, after the aphthous membranes have fallen, there frequently remain ulcers or fissures in the mucous membrane, which act as avenues for the passage of septic material. To avoid infection, it is desirable in hospitals to insist upon the washing of the mouth at least once daily with an antiseptic solution—perhaps of boracic acid—after which the aphthous membrane should be touched with a solution of resorcin, hypermanganate of potash, boracic or salicylic acid, upon absorbent cotton, no piece of cotton being used for more than one application. The ulcerated portions should be touched with nitrate of silver solution.

5. Since infection may be transmitted by the folds of the anus, it is essential in cases of erythema ani and rhagades that there also should be antiseptic treatment of these parts. The same remark applies to intertriginous patches and lesions of the skin of the head or any other portion of the body which may have been produced during labor.

6. The use of antiseptic precautions is also necessary in vaccination. In foundling asylums, where vaccination is performed soon after birth, erysipelas and phlegmonous inflammations have become much less common where antiseptics is employed. In the Moscow Foundling Asylum each child is bathed the day before it is vaccinated. Immediately before the vaccination clean clothes are put on the child, the nurse's hands are washed, and the arm of the child is washed with a disinfectant solution. As soon as the vaccination wound is dry, the dry blood is washed

off with a disinfectant. During the period of efflorescence and drying of the pustules the wound is again disinfected and covered with boracic or iodoform ointment. The stall in which the calf is kept is always clean, and the calf's abdomen is washed with sublimate solution at the time it is inoculated, and again when the lymph is taken. The vaccinating instruments and the glass tubes are also disinfected.

The greatest care must be used in washing the skin of new-born infants on account of its ready absorbability. A two per cent. solution of carbolyzed oil has been known to produce the most violent symptoms of intoxication. Salicylic acid is also too poisonous when used in solutions of ordinary strength. For very young children boracic acid is much the safest agent for disinfectant purposes, and its general use is therefore to be recommended to midwives.—*Arch. Pediatrics.*

Exudative Peritonitis of Children.

In the *Archiv. für Kinderheilkunde*, Dr. MAX HIRSCHBERG communicates eight cases of undoubted chronic tuberculous peritonitis, and four cases of a non-tuberculous nature, from Baginsky's polyclinic. The clinical differential diagnosis between the two forms is extremely difficult, frequently about impossible. In favor of the tuberculous form are: tuberculous disease in the lungs, testicle, bones, lymph-glands; associated with marked, steadily progressive emaciation, hereditary taint, redness about the navel, with eventually formation of abscess and the detection of tumors by palpation.

Treatment consists in the maintenance of the strength of the patient, and if possible improving it by the use of strengthening food, iron, cod-liver oil, extract of malt, etc. Then the

absorption of the exudate is to be started by diuresis and diaphoresis, cold water or cold wrappings. Inunctions with mercurial and iodoform ointment are to be tried. We are powerless against the tuberculous process proper. The author thinks König's proposal of laparotomy with antiseptic washing of the peritoneum is worthy of further trials. Early paracentesis, as proposed by Fiedler, he thinks can for the most part be dispensed with, as the end can be achieved without it.—*Deut. Med. Zeit.*

Cold Water Prevents Cholera Infantum.

DR. H. F. HENDRIX concludes, in a paper on cholera infantum, in the *Weekly Medical Review*: To prevent disease, I claim, is as much the duty of the physician as to cure, and any thing to that end suggested by the medical profession will, I feel sure, find a ready response in the hearts of the people; and in this connection I feel it my duty to say (taking my own observation as a guide) that cholera infantum will not occur in any case where a plentiful supply of cold water is given at all times and on all occasions, night or day, whenever the little one desires it. And, further, I would like to impress it upon the minds of all who have the care of children to lay aside any scruple of reserve they have in regard to giving cold water, and to give it freely. Those not able to let their wants be known should have it placed to their lips and drink to their satisfaction.

OBSTETRICS.

Spontaneous Evolution: a Case of Back Presentation.

PROFESSOR P. BUDIN (*Le Progrès Médical*):

A woman in an advanced period of labor was lately brought to us;

she had a trunk presentation, and the expulsion of the fetus was accomplished without our intervention. This circumstance—rare at term—has received the name of “spontaneous evolution.” The case merits citation as calling our attention to practical considerations concerning the mechanism of delivery, and also because it involves some remarkable peculiarities.

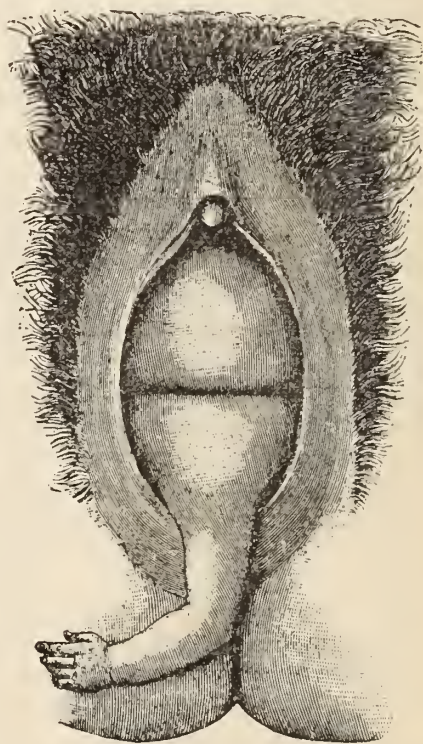


Fig. 1.

We know that when a child presents by the shoulder, unaided delivery cannot generally take place. Under special conditions, however, the delivery terminates under the action of the simple forces of nature, by spontaneous version—pelvic or cephalic—or by spontaneous evolution.

The patient referred to had previously had two normal pregnancies. The date of the present gestation could not be ascertained. Its evolution appears

to have been normal, although about one month ago the patient experienced great mental suffering from the loss of one of her children. She attributes her present premature labor to this cause.

On Dec. 20, at 4 P.M., the pains first appeared; they were very intense from the start. A 7 o'clock a midwife thought proper to break the bag of waters. The pains stopped and did not recur until 5 o'clock on the next morning. An exploration by the mid-

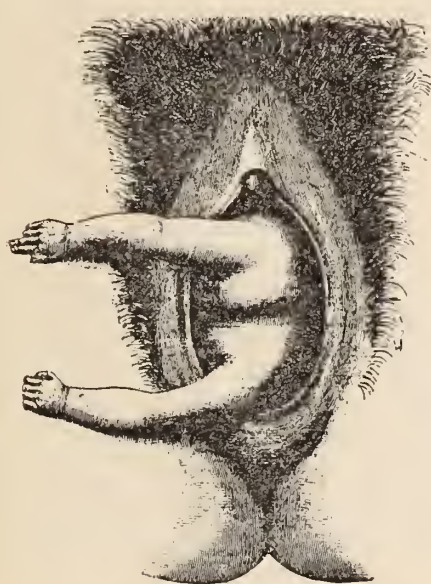


Fig. 2.

wife convinced her that all was going well. At noon, however, she decided to send the case to the hospital.

We found the patient—a well made woman *et. 30*—much fatigued and very restless. The pains were unrelenting and the uterus, which was in a state of tetanus, formed a hard, round mass, raised about two finger breadths above the umbilicus. Its volume would indicate a pregnancy of 7 to 8 months, and its conformation was quite irregular; the tumefaction was more marked on the right than the left. A protruding arm rested against the posterior wall of

the vulva. (Fig. 1.) The sound of the fetal heart could not be heard; a uterine souffle was made out two finger breadths above the umbilicus at the left of the median line. Following up the arm with the finger we found the edges of the uterus contracted; the dilatation was equal to about 5 centimetres. The finger found a region, deeply engaged, comprised between the pubis and the arm; the signs were extremely difficult to make out, suggesting as they did a possibility of either a shoulder or seat presentation—perhaps one of the vertex. In seeking to explore around the accessible fetal part, the finger slipped back of the pubis and made out vaguely the signs given by the acromion and the borders of the omoplate. This gave the idea of a shoulder presentation with procidence of the opposite arm, *i. e.*, a right shoulder presentation.

A quarter of an hour later, a second examination gave a notable modification of the signs. The finger met at the centre of the pelvis a deep, straight transversal furrow whose touch suggested the spinous apophyses of the sacral crest. The softness of the two prominences suggested the buttocks of the fetus, and the first diagnosis was changed to seat presentation. Nevertheless it was impossible to find an anal orifice, or the genital organs; and there was no meconic discharge.

The uterine contractions were strong and sustained; the fetal parts gradually descended until they came to the vulva, which became greatly expanded. An attentive examination now revealed the fact that the appearances cited arose from the pressing together, in a transversal position, of the superior median portions of the muscles and tissues of the back of the fetus. (Fig 1.)

The woman finally made violent

efforts, the vulvar orifice opened more and more, and the shoulders became disengaged simultaneously. The left arm being very procident, the right was aided when it appeared below the symphysis. Both arms were now held over to the right, and in this position they certainly bore a close resemblance to the inferior members of the fetus, branching off as they did from the tumefied scapular parts pressed one against the other. (Fig. 2.)



Fig. 3.

We assisted finally "the spontaneous evolution" of the fetus; the placenta followed naturally in half an hour. The child was a male and weighed 2,070 grams; it measured 46 centimetres, and was born dead and macerated. The face was of a brownish tint; here and there we found large red spots, together with ampullæ and erosions, the former filled with serum. The procident member was red, swollen, œdematous and denuded of skin. The fetus had prob-

ably been dead for three days before delivery, although the mother thought she had felt movements a few hours before.

The superior and posterior region of the trunk was the seat of a large sero-sanguineous hump which extended from the neck to the middle of the body. (Fig. 3.)

This is not the first time I have met with this sort of presentation. The lesson to be learned from it is: Practice digital examination with the greatest care; do not be satisfied with scrutinizing the parts which present, but make a minute exploration of every accessible part.—*N. Y. Medical Abstract.*

Bag of Waters.

PROFESSOR PARVIN says: The bag of waters generally ruptures at the beginning of the second stage of labor. Should it not do so, it is advisable to rupture it, and this may be done generally by firm pressure of finger against it during uterine contraction. If this method does not succeed, a few notches may be cut in the finger nail, using it as a saw against the membranes.—*Coll. & Clin. Record.*

An Additional Treatment of Post-Partum Hemorrhage.

MR. RAINSFORD F. GILL (*Lancet*) recommends the substitution of rectal injections of saline solution in place of transfusion, or, rather, in those cases where the performance of transfusion is impossible from want of the necessary apparatus. He refers to a case in which he believes that life was saved by the employment of this method. He recommends that only two or three ounces of the fluid be injected at a time, and that the injections be repeated from ten to fifteen minutes,

using a tepid solution, and, of course, employing auxiliary methods of relieving the existing shock to the system.

Influence of Pregnancy on Pelvic Diseases.

DR. HUNTER read a paper with this title in which he opened with the remark that it was the popular opinion that pregnancy was a remedy for many of the diseases of women; on the other hand, patients with pelvic troubles were often advised by their physicians not to marry, as pregnancy would increase the local affection. It was important to remember at the outset that during pregnancy there was a permanent congestion of the pelvic organs, which would naturally tend to exert even more of a deleterious influence on local disease than did the menstrual periods, when the congestion was only temporary. Affections of the external genitals such as were aggravated by hyperæmia, were always worse during pregnancy, especially pruritus. Malignant disease of the vagina usually progressed more rapidly. Prolapse of the vaginal wall became more marked. Erosions of the cervix was aggravated in early pregnancy, but lacerations were not particularly affected. Epithelioma grew rapidly during this period, and sometimes impeded delivery. Among uterine displacements, congenital ante flexion was usually relieved or cured, while retro flexion led to abortion. In some cases of retro flexion with fixation, in which pregnancy progressed to term, the uterus became more movable after involution had occurred, but more often subinvolution resulted and the original displacement was aggravated. In general, the influence of a normal pregnancy on displacements was good, but abortion led to serious results. Subperitoneal fibroids were not much affected by pregnancy, but sessile growths were apt to undergo

changes under its influence, seen especially in their increased vascularity and their enlargement. Small tumors might undergo atrophy or fatty degeneration in consequence of pressure. Endometritis was usually aggravated, and, in consequence of septic absorption after abortion, salpingitis might occur. Adherent ovaries and tubes might be torn as the gravid uterus enlarged: there was apt to be severe pain which might simulate that due to extra-uterine pregnancy.

Oophoritis was likely to be aggravated by the hyperæmia attendant on pregnancy; prolapse of the ovary commonly resulted from imperfect involution. Ovarian cysts probably grew more rapidly during gestation, and there was evidence that malignant disease made rapid progress at this time, although it had not been proved that it had originated then. Among the injuries to which ovarian cysts were subject during pregnancy were torsion of the pedicle, rupture, hemorrhage, and suppuration; abortion was a secondary result.

A laceration of the cervix was not necessarily increased by a subsequent delivery, but there seemed to be some danger that malignant disease might develop in such a cervix. In some instances the induration in the angle of the tear seemed to grow softer, but it did not appear to have undergone any change when the patient was examined after delivery. If a patient with parametritis became pregnant she might have severe pain during the period of gestation; simulating that of extra-uterine pregnancy, though more constant. If she passed the third month without aborting she might be cured. Parametritis was more apt to follow abortion than labor at term. In conclusion, it might be said in cases of malignant disease of the cervix, endometritis, and

diseases of the ovaries and tubes, that pregnancy was a positive evil.

Dr. Skene said that the subject was one of great practical interest, since the physician was often called upon to decide what the effect of pregnancy would be in a given case of pelvic disease. Pregnancy exerted a marked influence on the general nutrition. Delicate women with scanty menstruation might be greatly improved. Certain displacements, especially flexions, which were aggravated by malnutrition, might be corrected by utero-gestation. As regarded old pelvic adhesions, the speaker thought that the risks of ensuing pregnancy more than counter-balanced the occasional benefits. Cases of retroversion, if properly treated, might be cured, but if the patients were not carefully treated after delivery, the displacement was apt to recur. The speaker had verified the author's statement with regard to the influence of pregnancy upon hyperæmic and prolapsed ovaries; the prolapse might be relieved, but usually recurred after confinement.—*N. Y. Medical Journal.*

Tissue Changes in the Human Fetus.

A PAPER, by Dr. DUHRSEN, of Berlin, in the *Archiv für Gynäkol.*, gives the result of some recent investigations into the subject. After giving benzoate of soda and glyccol, as Gusserow had previously done, to women in labor, he was able to confirm his chief's investigations as to the presence of hippuric acid in the urine of a child when born, and likewise in the liquor amnii. In six cases, however, he found benzoic acid, but no hippuric acid in the placenta. The statement of Ahlfeld, therefore, that the benzoic acid became converted into hippuric acid before it reached the fetus, was proved to be incorrect. In three of the cases, hippuric

acid was also found in the urine; it must therefore have been formed in the fetus from benzoic acid and glyccol. Hippuric acid was not so constantly met with in the liquor amnii; but its presence there proved urination on the part of the fetus into it. As it was not constantly present, however, the author assumes that urination does not take place continuously. He believes that the kidneys are active as early as the second half of pregnancy, that the liquor amnii is a secretion from the kidneys of the fetus and not a nutrient fluid. From the absence of benzoic acid in the liquor, it follows that there is no transudation into it through the maternal decidua in the latter half of pregnancy. Another point demonstrated by the investigation is that the liquor amnii is not in part a transudation from the vessels of the cord, otherwise the benzoic acid which reaches the fetal circulation as such would also be met with in it. A proof of the activity of fetal tissue changes, if such were needed, lies in the fact that the whole of the hippuric acid was excreted from the fetal kidneys within twenty hours of the administration of the benzoic acid to the mother, and this shows also that labor had no influence in retarding the changes. If the benzoic acid was given twenty hours before the birth of the child, its urine showed no trace of hippuric acid; it had all been emptied into the liquor amnii before the completion of the act of parturition. The benzoic acid appeared in the placenta within three-quarters of an hour of its administration. Reckoning the quantity of albumin passing to the fetus from the maternal blood by the proportion of the benzoic acid given to the mother that passed through the placenta, it was estimated that it received about 80 grs. daily.—*Medical Press and Circular.*

BOOK NOTICES.

THE PATHOLOGY, DIAGNOSIS AND TREATMENT OF THE DISEASES OF WOMEN; by Grailey Hewett, M. D., London, F.R.C.P. A new American, from the Fourth Revised Enlarged English Edition. Edited, with notes, additions and illustrations, by H. Marion-Sims, M. D. Three octavo volumes, with over 1000 pages and 240 illustrations. E. B. Treat, publisher, New York City.

The adding of this work by so celebrated an author as Grailey Hewett to the edition published by Mr. E. B. Treat, under the general title of *Medical Classics*, will convince our readers that the original intention as announced in the prospectus, has been lived up to and the name adopted not in any sense been a misnomer.

We can only, in this short notice, mention some of the subjects discussed. Volume one opens with a chapter on General Considerations of Diseases of the Sexual Organs in Women; then follows chapters on Natural History of the Uterus and Ovaries; Examination of the Uterus and Ovaries; Symptomatology of Diseases; General Pathology; Abnormal conditions of the Tissues; Subinvolution; Displacements and Flexions. The treatment of this subject is especially complete and concludes volume one.

Volume two opens with a chapter on Pregnancy associated with Flexions of the Uterus; Vomiting of Pregnancy; Diseases and injuries of the Os and Cervix; Chronic Inversion; Prolapsus; Amenorrhœa; Menorrhagia; Dysmenorrhœa; Leucorrhœa; Nervous Disorders referable to the Uterus—in this connection the author demonstrates that *hysteria* is an *uterine* reflex symptom and not ovarian, as usually held by other writers—Pelvic cellulitis; Pelvic Peritonitis.

Volume three contains chapters on Tumors, benign and malignant, connected with the Uterus; Diseases of the Fallopian tubes; Diseases of the Ovaries; Diseases of the Perineum and Vulva; Diseases of the Vagina; Diseases of the Urethra and Bladder. To this volume is added an appendix containing

a discussion of such subjects as: The Differential Diagnosis of Pains referable to the Generative Organs; Pelvic Tumors, including Pregnancy and Sterility. A glance at these subjects will convince the reader that no subject has been omitted that could in any way be associated with the female reproductive organs. The diction is clear and the illustrations adapted to the student as well as practitioner. Dr. Marion-Sims has added many valuable annotations and thoroughly Americanized the volumes. This is just the work that should be associated with other works on this subject, as it contains so many ideas, perhaps, at variance with those adopted by American authors, but still so thoroughly and carefully discussed as to leave the mind of the reader in doubt and thereby lead him to accurate and persistent clinical investigation—the only way to arrive at the truth. The volumes are printed in readable type, and should be in every physician's library.

MEDICAL DIAGNOSIS; A MANUAL OF CLINICAL METHODS; by J. Graham Brown, M. D., Fellow of the Royal College of Physicians of Edinburgh, etc., etc. Second Edition. E. B. Treat, Publisher, 771 Broadway, N. Y. City.

The title of this volume, sufficiently indicates its subject-matter. We cannot, however, avoid giving a few hints at the various subjects, which are handled in a peculiarly concise and clear manner by the writer.

One thought contained in the introduction to this volume, to our mind, includes much if not the greater requisite of the successful practitioner. We quote the sentence entire: "The most critical examination of symptoms, the most careful inquiry into the state of internal organs, the most logical deductions from these as to morbid changes from which they have originated, will often be erroneous, unless the physician is also a *student of human nature*, and is able to arrive almost intuitively at some knowledge of the mental characteristics and peculiarities of his patient."

From this statement the reader can readily imagine that the thoughts contained in the first chapter on the general aspect, condition, and circumstances of the patient is well worth the price of the entire volume. Chapter two discusses the Alimentary Canal, then follow chapters on the Circulatory System, Nervous System, Urinary System, Respiratory System, etc. Every chapter is readable and contains information thoroughly and carefully summarized, so that the value of a work of this kind to the general practitioner is self-evident.

ALDEN'S MANIFOLD CYCLOPEDIA. John B. Alden, Publisher, 393 Pearl street, New York City. Volume 2.

The second volume of this cyclopedia continues the excellence already noted and dwelt upon in our notice of the first edition recently. No one who values information, either about the words of the English language or the various information contained in a volume of this kind about men and things, will fail to subscribe for this handy edition. It is unique, well up with the times, and will be an ornament to any one's library who possesses it.

MANUAL OF DIETETICS FOR PHYSICIANS, MOTHERS AND NURSES. By W. B. Pritchard, M. D., New York City. Price, 50 cents.

This little volume, written especially in the interests of malted milk, contains most useful information on the important subject of dietetics. It is well written, and gives a carefully arranged diet for the various diseases to which man is subject, and will aid materially in solving that important question which is so often propounded to the physician—the question of proper food for the patient.

THE PHYSICIANS' VISITING LIST. P. Blakiston, Son & Co., 1012 Walnut street, Philadelphia, Pa., Publishers.

One of the oldest and one of the best visiting lists, arranged in book form, is this one annually furnished by Messrs. P. Blakiston, Son & Co. We note no addition to last year's edition, and certainly could see no occasion for any improvement. Too many

therapeutic facts and other information make these visiting lists unnecessarily cumbersome, without any corresponding advantages. We recommend this list to our readers.

THE MEDICAL WORLD VISITING LIST.—This visiting list is arranged in movable tablets, and each monthly record is kept separately. Accompanying the visiting list is a very ingeniously arranged "Ledger of monthly balances," where each patient's account is kept ready for immediate reference. This system needs only to be used to be appreciated.

THE CASE OF EMPEROR FREDERICK III. Full Official Reports by the German Physicians and Sir Morell Mackenzie. Edgar S. Werner, 48 University place, New York City, Publisher.

Mr. Werner has done the American medical profession a favor in publishing both sides of this question; for, unfortunately, there seems to have been two sides to this question, with the usual fatal result to the patient. We shall not endeavor to criticise or comment on this volume, but advise our readers to purchase it and become fully acquainted with the facts as dually presented. Mr. Werner will accept our thanks for the copy sent, the perusal of which has been exceedingly interesting to us.

DR. L. D. MASON, of Brooklyn, N. Y., one of the pioneers in the study of inebriety in this country, has caused to be issued the following circular:

In behalf of "The American Association for the Study and Cure of Inebriety," the sum of one hundred dollars is offered by Dr. L. D. Mason, Vice-President of the Society, for the best original essay on "The Pathological Lesions of Chronic Alcoholism Capable of Microscopic Demonstration."

The essay is to be accompanied by carefully prepared microscopic slides, which are to demonstrate clearly and satisfactorily the pathological conditions which the essay considers.

Conclusions resulting from experiments on animals will be admissible. Accurate drawings or micro-photographs of the slides are desired.

The essay, microscopic slides, drawings or micro-photographs are to be marked with a private motto or legend and sent to the Chairman of the Committee on or before October 1st, 1890.

The object of the essay will be to demonstrate: First, Are there pathological lesions due to chronic alcoholism? Secondly, Are these lesions peculiar or not to chronic alcoholism?

The microscopic specimens should be accompanied by an authentic alcoholic history, and other complications, as syphilis, should be excluded.

The successful author will be promptly notified of his success, and asked to read and

demonstrate his essay, personally or by proxy, at a regular or special meeting of the "Medical Microscopical Society," of Brooklyn. The essay will then be published in the ensuing number of *The Journal of Inebriety* (T. D. Crothers, Hartford, Conn.) as the prize essay, and then returned to the author for further publication or such use as he may desire. The following gentlemen have consented to act as a Committee: W. H. BATES, M.D., F.R.M.S., Lond., Eng. (President Med. Microscopical Soc., Brooklyn), 175 Remsen Street, Brooklyn, N. Y. JOHN E. WEEKS, M.D., 43 West 18th Street, New York. RICHMOND LENNOX, M.D., 164 Montague Street, Brooklyn, N. Y.

PUBLISHERS' DEPARTMENT.

Obstinate Constipation.

E. A. Scott, M. D., Columbus, Kan., says: I have a patient, a man, who has been constipated four years; has called upon all the physicians in the place; none had benefited him, never having an action upon the bowels oftener than six to eight days. He is now taking the Acid Mannate, small doses daily, keeping his bowels free. I have a lady patient who is suffering with a uterine trouble, and has periodical nervous sick headache (I think solely dependent upon the uterine troubles); she is also constipated. I have her upon the Acid Mannate; she, as well as myself, is pleased with its effect; her headaches are not so frequent or severe.

Johanson's Nerve Broaches.

These very important instruments for dentists' use are now made in the greatest perfection by Mr. Johanson. They are so tempered that they can be tied in a double knot without breaking. Surgeons might find these very useful in various ways. The maker will gladly send samples. His address may be found in his advertisement. One of our prominent New York dentists, Dr. F. R. Secord, says about them: "They are so vastly superior to any thing before made, that I use no others."

Sulfonal and Phenacetin.

Dr. C. E. Bruce, who has just been appointed visiting physician to the House of Rest for Consumptives, at Tremont, speaking of these two remedies introduced by Messrs. Wm. H. Schieffelin & Co., says: "They are undoubtedly two of the most valuable remedies we have, for the reason that so much can be accomplished with them without any of the undesirable results of most other preparations. In the treatment of phthisis phenacetin has accomplished wonders for me."

Bromidia.

Dr. Esguive, Colonization physician to the Paris-Lyons-Mediterranean Railway Bon-Medja, France, March 28, 1887, says:

"I tried Bromidia (Battle) on two cases of insomnia, which I had already treated for some time, with a mixture of equal parts of bromide of potassium and chloral. I noticed that hypnotic results were produced with much smaller doses of Bromidia than of the mixture of bromide and chloral. In a large number of cases it is important not to push too far the quantity of bromide of potassium. On this account I believe Bromidia is destined to be of real value, particularly in insomnia of cardiac origin, and I deem it vastly superior to the simple mixture of bromide of potassium and chloral."



THE DENTIST'S SOFT TEMPERED STUB STEEL ROUND
NERVE BROACHES.

OLOF JOHANSON,
 PATENTEE AND SOLE MANUFACTURER,
 No. 1 MAIDEN LANE, NEW YORK.

OLOF JOHANSON,
DENTISTS' NERVE BROACH,

Patent No. 251,598. Patented Dec. 27, 1881.

Postage paid to any part of the United States and Canada.

Since patenting these Broaches, I have improved them by making them cylindrical instead of conical, permitting of a more distinct barb at the point, also the permanent attachment to each Broach of a brass stem of convenient size and length for handling. Dentists who have examined these improved broaches, and are using them, say they are perfection and far superior to any broach made, being so finely tempered, they never break in the nerve canal as is so often the case with those usually made.

By recent improvements the Broaches are made in four sizes. For Sale by all Wholesale Dealers only.

Note following from some of the most prominent Dentists in the United States.

The undersigned Dentists, state that they are familiar with all the various kinds of Dental Broaches manufactured; that they are acquainted with and have used the Broach invented, patented, and manufactured by OLOF JOHANSON of New York City; and that they consider said Broach superior to any known to them, and use it in preference to all others.

Norman N. Kingsley, No. 25 West 27th Street, New York, in practice 29 years.		
E. S. Woodward, No. 361 Fifth Avenue,	"	20 "
George F. Schaffer, No. 44 West 34th Street,	"	17 "
John B. Rich, M. D., No. 12 East 22d Street,	"	43 "
William A. Dwinelle, M. D., No. 27 West 34th St.,	"	41 "
A. S. Northrope, No. 44 West 4th Street,	"	20 "
N. Malon Beckeirth, No. 125 West 42d Street,	"	42 "
E. Todd, No. 47 East 29th Street,	"	12 "
W. D. Tenison, No. 45 East 28th Street,	"	19 "
M. M. Maltby, D. D. S., No. 32 East 24th Street,	"	14 "
W. A. Bronson, M. D., No. 8 East 34th Street,	"	30 "
C. E. Francis, D. D. S., No. 33 West 44th Street,	"	21 "

Spiral Handle.—I can furnish these Broaches with my new Spiral Handle, thus giving a flexible and pliable Handle that can be bent to any shape and be of great use to the operator.

Send all orders to **OLOF JOHANSON,**
 No. 1 Maiden Lane, NEW YORK CITY.

FELLOWS' HYPO-PHOS-PHITES

(SYR : HYPOPHOS : COMP : FELLOWS)

Contains *The Essential Elements* to the Animal Organization — Potash and Lime ;

The *Oxydizing Agents* — Iron and Manganese ;

The *Tonics* — Quinine and Strychnine ;

And the *Vitalizing Constituent* — Phosphorus,

Combined in the form of a syrup, with *slight alkaline reaction*.

It Differs in Effect from all Others, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

It has Sustained a High Reputation in America and England for efficiency in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs, and is employed also in various nervous and debilitating diseases with success.

Its Curative Properties are largely attributable to Stimulant, Tonic and Nutritive qualities, whereby the various organic functions are recruited.

In Cases where enervating constitutional treatment is applied, and tonic treatment is desirable, this preparation will be found to act with safety and satisfaction.

Its Action is Prompt; stimulating the appetite and the digestion, it promotes assimilation, and enters directly into the circulation with the food products.


The Prescribed Dose produces a feeling of buoyancy, removing depression or melancholy, and hence is of great value in the treatment of MENTAL AND NERVOUS AFFECTIONS.

From its exerting a double tonic effect and influencing a healthy flow of the secretions, its use is indicated in a wide range of diseases.

Each Bottle of Fellows' Hypophosphites contains 128 Doses.

Prepared by JAMES I. FELLOWS, Chemist,
48 Vesey Street, New York.

Circulars and Samples sent to Physicians on application.

 **SPECIAL TO PHYSICIANS**—One large bottle, containing 15 oz. (which usually sells for \$1.50) will be sent upon receipt of *Fifty Cents* with the application. This will be applied to the prepayment of Expressage, and will afford an opportunity for a thorough test in Chronic Cases of Debility and Nervousness. Express charges prepaid upon all samples.

FOR SALE BY ALL DRUGGISTS.

THE Improved Rorick System of Rectal Treatment



The only original, progressive and actually scientific Rectal Treatment in existence.

25 Physicians operating this system for three years each, report

11,069 CASES

OF
Hæmorrhoids,
Fistula,
Fissure
AND
Prolapsus

treated with only 5-9 of one per cent. of failures to cure, and **not a single death** or other accident. No such record known to any other system. **These are facts.** We have the reports on file for inspection. We say without fear of successful contradiction that the physician who operates

the methods which have shown a certain percentage of fatalities is criminally responsible to his patients.

For illustrated pamphlet and circulars giving full information concerning this treatment, address immediately,

Drs. RORICK & MILEY, No. 701 Cherry St., Toledo, Ohio.

DOCTORS, LOOK HERE!!

FIRE AND BURGLAR PROOF
SAFES

AT WHOLESALE.

WANTED!

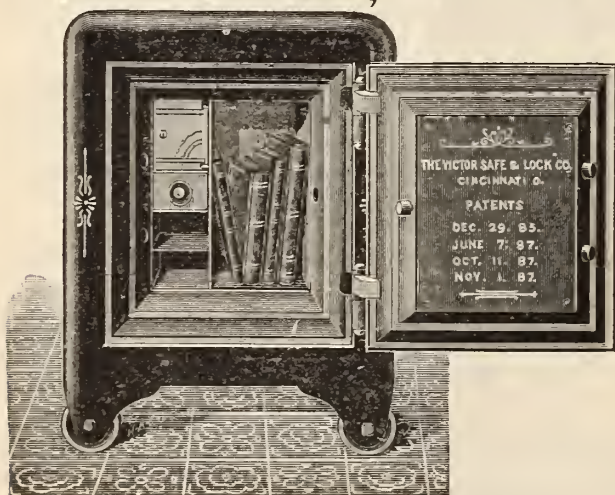
WANTED!

WANTED!

The names and addresses of all Lawyers, Doctors, Merchants, small dealers, Farmers, Housekeepers, and men of every calling

WHO HAVE NO SAFES.

We will furnish you with a first-class Safe, strictly fire-proof, burglar-proof combination lock, beautifully finished and lettered with name, at \$12 and upwards.

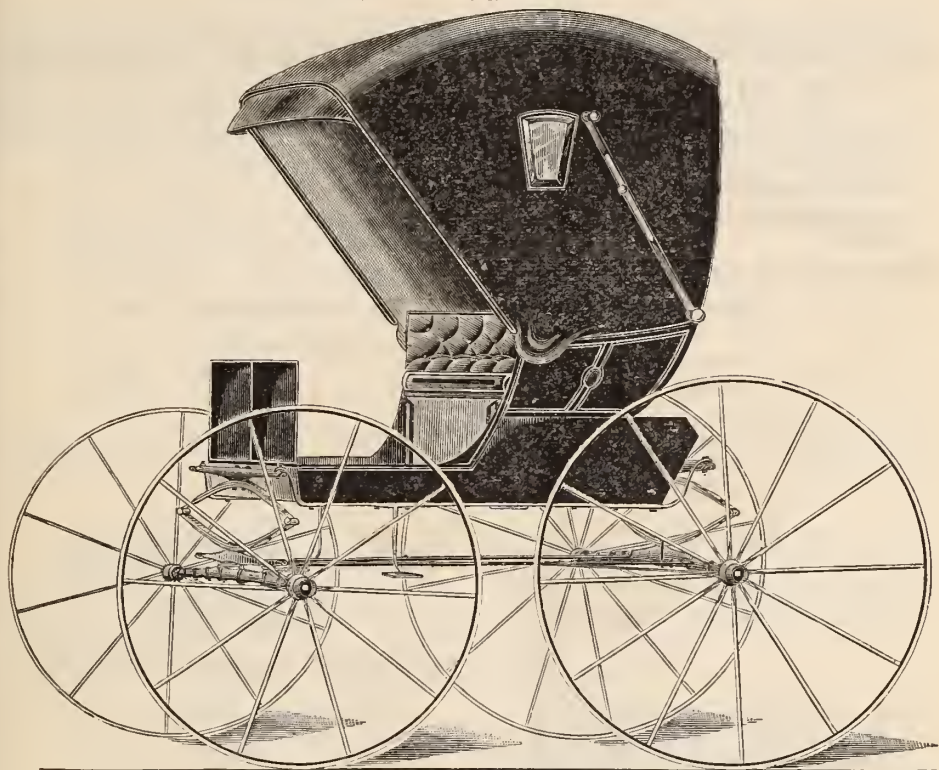


DEATH TO HIGH PRICES.

We pay no salaries or commissions to middlemen nor agents. We have no high salaried officers, but practice strictest economy to enable us to sell direct to the user at **LOWEST WHOLESALE PRICES.** The **Victor Safes and Locks** are the latest improved and are manufactured under excellent patents, issued Dec. 29th, 1885; June 7th, 1887; Oct 11th, 1887; and Nov. 1st, 1887.

Every Safe is guaranteed Satisfactory. Our prices are about 80 per cent. lower than any others. Write for our prices and terms at once. *Don't fail to mention the Digest.*

THE VICTOR SAFE & LOCK CO.,
118 West 7th Street, CINCINNATI, OHIO.



LINN BROS..

MANUFACTURERS OF

FINE CARRIAGES,

47, 49, 51 & 53 BERGEN STREET, BROOKLYN, N. Y.

Telephone call 760.

*Broughams, Octagons, Coupes, Four and Six Seat Rockaways,
Victorias, Cabriolets, Extension and Canopy Top
Phaetons, and Surreys, Etc.*

PHYSICIANS' PHAETONS A SPECIALTY.

Below will be found the names of a few of the many physicians who have them now in use and will recommend them for their superior qualities. We make five different styles of them. Catalogues and Price Lists will be furnished on application.

Dr. Henry Armgardt, 317 Leonard St., Brooklyn, N. Y.

" E. S. Bunker, 117 St. Johns Place, " "

John Byrne, 301 Clinton St., " "

" Wm. M. Butler, 507 Clinton Ave., " "

“ C. M. Bellows, 442 Nostrand Ave., “ “
“ N. M. Carter, 409 Washington Ave. “ “

" N. M. Carter, 499 Washington Ave., " "
" E. Eltinge, 2 Verona Place, " "

" E. Esting, 2 Verona Place, " "
" George Fowler, 645 Marcy Ave " "

" William Gilfillan, Remsen & Henry St., " "

" E. Hilton, 204 South 8th St., " "

⁴⁴ H. J. Hesse, late Coroner, 163 Bushwick Ave.

Brooklyn, N. Y.

⁴⁴ M. A. D. Jones, 168 Dekalb Ave., ⁴⁴ ⁴⁴

" Chas. N. D. Jones, 163 Dekalb Ave., " "
" Chas. Jewett, 207 Gates Ave. " "

" Chas. Jewett, 307 Gates Ave., " "
" Geo. C. Jeffery, 304 Jefferson Ave. " "

" J. C. Lester, 406 Clinton St., " "

" Nathan Matson, 415 Green Ave., " "

Nathan Mason, 415 Green Ave.,

Dr. William Matson, 415 Green Ave., Brooklyn, N. Y.

" John A. McCorkle, 149 Clinton St., " "

" John Merritt, 22 Lafayette Ave., " "

“ Wm. C. Murray, 436 Lewis Ave., “ “
“ C. H. Morgan, 222 1/2 “ “ “ “

“ C. H. Munroe, 363 Tompkins Ave., “ “
“ N. I. Brewster, 98 Lafayette Ave. “ “

" N. J. Preston, 98 Lafayette Ave., " "
" Frank W. Rockwell, 6 Lafayette Ave. " "

" Frank W. Roekwell, 6 Lafayette Ave., " "
" H. B. Smith, 131 Fort Green Place, " "

" A. Sanford, 345 Tompkins Ave., " "

" James Sweeney, 192 North 6th St., " "

" C. B. Schlatter, 158 Seventeenth St., " "

" Chas. T. Schmidt, 73 Stagg St., " "

“ James J. Terhune, 171 Adelphi St., “ “
“ William Waterworth, 102 Franklin Ave. “ “

" William Watersworth, 493 Franklin Av., "

⁴⁴ F. W. Knapp, Orange, N. J.

" W. W. Heberton, Orange, N. J.

W. W. Herberton, Orange, N. J.

NO LOOSE BRISTLES! NO BLEEDING GUMS!



Thorough Cleanser, Perfect Polisher.

Cheaper and Neater than Bristles.

WELCOMED BY A CHORUS OF PHYSICIANS

AS ITS PERFECT RESULTS ARE KNOWN

**A BLESSING TO ADULTS. A DELIGHT
TO CHILDREN. A BENEFIT TO ALL.**

Enforces cleanliness through the periodical renewal of
the polisher, at a cost of about one cent.

Its Economy: First cost 60 cents, for holder and
box of 18 Felt Polishers, latter only need be renewed,
25 cents per box: holder imperishable; at all druggists or
mailed by

MORSEY MFG CO., Utica, N. Y.

TO ADVERTISERS!

For a check for \$20 we will print a ten-line advertisement in One Million Issues of leading American Newspapers and complete the work within ten days. This is at the rate of only one-fifth of a cent a line, for 1,000 Circulation! The advertisement will appear in but a single issue of any paper, and consequently will be placed before One Million different newspaper purchasers; or FIVE MILLION READERS, if it is true, as is sometimes stated, that every newspaper is looked at by five persons on an average. Ten lines will accommodate about 75 words. Address with copy of Adv. and check, or send 30 cents for Book of 256 pages,
GEO. P. ROWELL & CO., 10 SPRUCE ST., NEW YORK.

We have just issued a new edition of our Book called "Newspaper Advertising." It has 256 pages, and among its contents may be named the following Lists and Catalogues of Newspapers:—
DAILY NEWSPAPERS IN NEW YORK CITY,
with their Advertising Rates.

DAILY NEWSPAPERS IN CITIES HAVING more
than 150,000 population, omitting all but the best.

DAILY NEWSPAPERS IN CITIES HAVING more
than 20,000 population, omitting all but the best.

A SMALL LIST OF NEWSPAPERS IN which to
advertise every section of the country; being a
choice selection made up with great care, guided
by long experience.

ONE NEWSPAPER IN A STATE. The best one
for an advertiser to use if he will use but one.

BARGAINS IN ADVERTISING IN DAILY News-
papers in many principal cities and towns, a List
which offers peculiar inducements to some adver-
tisers.

LARGEST CIRCULATIONS. A complete list of
all American papers issuing regularly more than
25,000 copies.

THE BEST LIST OF LOCAL NEWSPAPERS, cov-
ering every town of over
5,000 population and every
important county seat.

SELECT LIST OF LOCAL
NEWSPAPERS, in which
advertisements are insert-
ed at half price.

5,472 VILLAGE NEWS-
PAPERS, in which adver-
tisements are inserted for
\$12.15 a line and appear in
the whole lot—one half of
all the American Weeklies
Book sent to any address for **THIRTY CENTS.**



VACCINE VIRUS.

*Pure and Reliable Animal Vaccine
Lymph, Fresh Daily.*

LIBERAL TERMS. SEND FOR CIRCULAR.

10 Ivory Points.....double charged, \$1.00

10 Quill Slips (half quills).....double charged, 1.00

Orders by Mail or Telegraph promptly dispatched.

NEW ENGLAND VACCINE CO.,

Chelsea Station, Boston, Mass.

WM. C. CUTLER, M. D.

J. F. FRISBIE, M. D.

CHAS. R. AVERY,

PHARMACIST,

447 COURT ST., Cor. 4th PLACE,

BROOKLYN, N. Y.

Prescriptions carefully compounded.

PARKE, DAVIS & Co.'s AND SQUIBB'S

PREPARATIONS IN STOCK.

Telephone Call, 1023.

CHARLES DENNIN,

Druggist & Apothecary

FIRST PLACE,

Cor. Court St. **BROOKLYN, N. Y.**

TELEPHONE CONNECTION.

SQUIBB'S PREPARATIONS DISPENSED.

ALETTRIS CORDIAL

UTERINE TONIC AND RESTORATIVE.

Prepared from the Aletris Farinosa or True Unicorn and Aromatics.

INDICATIONS.

Amenorrhea, Dysmenorrhea, Leucorrhea, Prolapsus Uteri, Sterility, to Prevent Miscarriage, Etc.

DOSE:—ONE TEASPOONFUL THREE OR FOUR TIMES A DAY.

UNRIVALED AS A UTERINE TONIC IN IRREGULAR, PAINFUL, SUPPRESSED AND EXCESSIVE MENSTRUATION.

It Restores Normal Action to the Uterus, and Imparts Vigor to the Entire Uterine System.

Where women have miscarried during previous pregnancies, or in any case where miscarriage is feared, the ALETTRIS CORDIAL is indicated, and should be continuously administered during entire gestation.

CHAS. CLAY, M. R. C. S., Manor House, Dewsbury, England, says:—I find Aletris Cordial (Rio) is of great service in threatened miscarriage.

FRANCIS E. CANE, L. R. C. S., &c., Leeds, England, says:—I have tried the Aletris Cordial (Rio) in two cases of long standing dysmenorrhea, with excellent results. One of these patients has spent a week in bed every month for two years. After all the usual remedies, I put her on Aletris Cordial, and for the last two periods she has been out and about all the time.

L. M. WATSON, M. D., Delhi, Ills., says:—I have used Aletris Cordial (Rio) in cases of dysmenorrhea, suppressed menses and threatened miscarriage, and also, combined with Celerina, as a tonic after confinement, with the happiest results, and now I am using it on a case of leucorrhea, with injections of S. H. Kennedy's Extract of Pinus Canadensis, and it is acting like a charm.

P. H. OWEN, M. D., Morganville, Ala., says:—I have prescribed Aletris Cordial (Rio) in several cases with the most satisfactory results, and regard it as the best uterine tonic I have met with in a professional experience of over twenty-five years. In cases of threatened miscarriage it acts like a charm. Would recommend its continuous administration in all cases when there is any indication of miscarriage.

Dr. W. BERTHELOT, Santander, Spain, says:—I have tried the Aletris Cordial (Rio), and it has seemed to me to be useful, especially in cases of dysmenorrhea.

Dr. RASQUINET, Jupile, near Liege, Belgium, says:—I tried Aletris Cordial (Rio) in the case of a woman who had had several miscarriages at the end of five months, and who is now again pregnant, having reached the seventh month: thanks to Aletris Cordial.

R. REECE, M. R. C. S., Walton-on-Thames, England, says:—Aletris Cordial (Rio) in painful menstruation is most valuable. A wife of a minister suffered much, and had had three miscarriages. I prescribed Aletris Cordial. She has for the first time, gone her full time, and was safely confined with a male child.

J. T. COLLIER, M. D., Brooks, Me., says:—I have used your Aletris Cordial (Rio) in cases of females at the menopause. Consider it one of the finest remedies for these cases.

Dr. GORDILLON, St. Amand, France, says: I have tried the Aletris Cordial (Rio) in a case of dysmenorrhea. The result I obtained from the use of your preparation was excellent, better than I had obtained in the same patient by prescribing the usual remedies employed in such cases.

W. F. TOOMBS, M. D., Morrilton, Ark., says:—I have used a great deal of your Aletris Cordial (Rio) and I find it all you claim for it in amenorrhea, dysmenorrhea, metritis, leucorrhea; I don't think it has an equal. I have used it in two cases of threatened miscarriage and the trouble was obviated. For a general Uterine Tonic I know of nothing superior.

R. D. PATTERSON, L. R. C. S. &c., Medical Officer, Caledon Dispensary, Co. Tyrone, Ireland, says:—I have very great pleasure in testifying to the very high opinion I hold of Aletris Cordial (Rio) in threatened miscarriage.

RIO CHEMICAL CO., ST. LOUIS, MO., U. S. A.

LONDON,
16 Coleman St.

CALCUTTA,
9 & 10 Dalhousie Square.

PARIS,
5 Rue de la Paix.

MONTREAL,
374 St. Paul St.

MEDICO-CHIRURGICAL COLLEGE, OF PHILADELPHIA.

SESSIONS OF 1888-1889.

FACULTY.

JAMES E. GARRETSON, A.M., M.D.,
Professor of Oral Surgery and of Clinical Surgery.
WILLIAM H. PANCOAST, A.M., M.D.,
Professor of General, Descriptive and Surgical Anatomy, and of Clinical Surgery.
GEORGE E. STUBBS, A.M., M.D.,
Professor of Surgical Pathology and Clinical Surgery.
WILLIAM F. WAUGH, A.M., M.D.,
Professor of Principles and Practice of Medicine and of Clinical Medicine.
ABRAHAM S. GERHARD, A.M., M.D.,
Professor of General Pathology and of Medical Jurisprudence.
WILLIAM S. STEWART, A.M., M.D.,
Professor of Obstetrics and of Clinical Gynaecology.
H. EARNEST GOODMAN, M.D.,
Professor of Principles and Practice of Surgery, Orthopaedics and of Clinical Surgery.

PETER D. KEYSER, A.M., M.D., DEAN,
Professor of Ophthalmology.
THOMAS C. STELLWAGEN, M.A., M.D.,
Professor of Physiology.
FRANK WOODBURY, A.M., M.D.,
Professor of Materia Medica and Therapeutics, and of Clinical Medicine.
SAMUEL B. HOWELL, A.M., M.D.,
Professor of Chemistry.
JOHN V. SHOEMAKER, A.M., M.D.,
Professor of Skin and Venereal Diseases.
EDWARD E. MONTGOMERY, B.S., M.D.,
Professor of Didactic and Clinical Gynaecology.
WILLIAM B. ATKINSON, M.A., M.D.,
Professor of Sanitary Science and of Paediatrics.

OTHER INSTRUCTORS.

ISAAC BARTON, M.D.,
Lecturer on Laryngology and Chief Asst. in Throat Clinic.
M. H. CRYER, M.D., *Lecturer on Oral Surgery.*
FRANK FISHER, M.A., M.D.,
Lecturer on Ophthalmoscopy, and Chief Assistant in Eye Clinic.
BENJAMIN T. SHIMWELL, M.D.,
Lecturer on Minor surgery, and Chief-Assistent in Prof. Goodman's and Garretson's Surgical Clinic.
W. G. MCCONNELL, M.D., *Lecturer on Venereal Diseases.*
SPENCER MORRIS, M.D., *Lecturer on Symptomatology*
CONRAD BERENS, A.B., M.D.,
Lecturer on Otolgoy, and Chief-Assistent in Ear Clinic
W. XAVIER SUDDUTH, M.D., F.R.M.S.,
Lecturer on Diseases of the Genito-Urinary System, and Demonstrator of Pathological Histology.
HENRY C. BOENNING, M.D., *Demonstrator of Anatomy.*
E. S. GANS, M.D., *Instructor in Dermatology.*
E. L. B. GODFREY, M.D., *Lecturer on Fractures.*
A. E. ROUSSEL, M.D., *Adjunct to the Chair of Practice*
L. HARRISON METTLER, M.D.,
Lecturer on Electro-Therapeutics.
G. W. McCASKY, M.D.,
Lecturer on Mental and Nervous Diseases.
WILLIAM M. WELSH, M.D.,
Lecturer on the Eranthematia.
CHARLES M. SELTZER, M.D.,
Lecturer on Therapeutic Dietetics.
MAX J. STERN, M.D., *Instructor in Laryngology.*

E. L. VANSANT, M.D.,
Chief-Assistent in Medical Dispensary; Demonstrator of Normal Histology.
JOHN AULDE, M.D.,
Demonstrator of Physical Diagnosis.
J. W. WEST, M.D., *Demonstrator of Gynaecology.*
L. GREENBAUM, M.D., D.D.S.,
Demonstrator of Chemistry.
HENRY FISHER, Ph. G., M.D.,
Demonstrator of Pharmacy.
E. GREWER, M.D., *Demonstrator of Practical Physiology.*
T. RIDGWAY BARKER, M.D.,
Assistant in Clinical Surgery.
M. F. LORMAN, M.D.,
Chief-Assistent to the Surgical Clinic.
ROBERT WHARTON, M.D.,
Assistant in Surgical Clinic.
VICTOR G. R. RHEN, M.D.,
Assistant in Paediatrics.
LOUIS VON COTZHAUSEN, M.D., Ph.G.,
Assistant in Medical Clinic.
J. J. TAYLOR, M.D., *Assistant in Medical Clinic.*
W. J. HOLLY, M.D., *Assistant in Surgical Clinic.*
C. FITZPATRICK, JR., M.D.,
Assistant in Surgical Clinic.
W. A. N. DORLAND, M.D., *Assistant in Gynaecology.*
A. L. SAVAGE, M.D., *Assistant in Clinical Surgery.*
P. S. DONNELLAN, L.K.Q.C.P., L.R.C.S.I., L.M.,
Assistant in Medical Dispensary.
C. L. FISHER, M.D.,
Assistant in Prof. Pancoast's Surgical Clinic.

Every candidate for admission who does not present a degree in Arts or Sciences, a certificate of graduation in a high or normal school, or a certificate of having passed a satisfactory examination of a duly organized County Medical Society, must undergo an examination in English, Latin, Physics and Mathematics. The examination may be conducted by one of the Censors or at the College. Instruction is given by lectures, clinical teaching and practical demonstrations. In the subjects of Anatomy, Pharmacy, Chemistry, Histology and Pathological Anatomy, the usual methods of instruction are largely supplemented by laboratory work. The year begins Sept. 10th, and is divided into a preliminary session of three weeks. A regular session of six months and a Spring session of ten weeks. Students are divided into three classes according to their time of study and proficiency. Students who have begun their professional studies elsewhere may be admitted to advanced standing upon satisfactory examination in the branches already pursued by the class to which they seek admission. Although the degree of DOCTOR OF MEDICINE is conferred at the end of three years' study, a fourth year is provided which is voluntary (but attendance upon which will afford the student increased facilities for practical study in clinical medicine, surgery and the various specialties.

ORDER OF STUDIES:

FIRST YEAR:—Anatomy (bones and ligaments), Physiology, General Chemistry, Materia Medica and Pharmacy, General Pathology and Hygiene. SECOND YEAR:—Anatomy (muscles, vessels and viscera), Medical Chemistry, Physiology, Physical Diagnosis, Therapeutics, Clinical Medicine, and Clinical Surgery. THIRD YEAR:—Anatomy (Nervous System), Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgical Pathology, Surgery, Clinical Surgery, Ophthalmology, Dermatology, Syphilis. Diseases of Women, Diseases of Children, Electro-Therapeutics and Forensic Medicine. FOURTH YEAR:—Ophthalmology, Otolgoy, Dermatology, Syphilis, Laryngology, Mental and Nervous Diseases, Diseases of Women, Diseases of Children, Clinical Medicine, Clinical and Operative Surgery, Orthopaedic Surgery, Oral Surgery, Forensic Medicine, Genito-urinary Diseases, Diseases of the Rectum, Diseases of the Female Bladder, Bacteriology, Clinical Microscopy, Preparation of Food for Infants and Invalids and Anaesthetics.

REQUIREMENTS FOR A DEGREE:—Every candidate must be twenty-one years of age, must have attended three or four full terms, one Winter session of which was spent at this school, have passed a written examination upon the prescribed studies of the course.

FEES:—Matriculation, \$5; for the first and second years, each, \$75; for the third year (graduation included), \$100; for the fourth year, to graduates of this school free; to graduates of other schools upon the payment of a matriculation fee, only graduates of a three years school will be permitted to join the graduating class for the degree of this school upon the payment of a fee of \$40. The above fees are conditional upon their being paid before Nov. 1st.

For further information, or Catalogue, address

Dr. E. E. MONTGOMERY, Sec'y, 1818 Arch St., or
Medico-Chirurgical College, Philadelphia, Pa.

THE STROUT

Heating and Ventilating System,

*FOR DWELLING HOUSES, CHURCHES AND
PUBLIC HALLS.*

H. C. STROUT & CO.

(Successors to Strout & Williams),

MANUFACTURERS OF

Strout's Patent Heating and Ventilating Attachments.

OFFICE:

No. 564 STATE ST., Cor. Flatbush Ave., BROOKLYN, N. Y.

The object of the Strout System is to equalize the temperature of buildings and prevent direct drafts and an unequal distribution of hot air, regulating its circulation so that all portions, upper and lower, shall be of uniform temperature and purity.

The system is exclusively adapted to dwelling houses, churches and all public halls and buildings that are heated from either the enclosed or portable furnace. It can readily be applied to any furnace in present use. The practical introduction of the same has invariably shown:

1. Its health-giving qualities in preserving at all times a pure circulation of heated air.
2. It makes the furnace distribute its maximum of heat, with a saving in coal of not less than 25 per cent., and in churches and public halls the gain is even greater.

For further particulars and circulars, address manufacturers as above.

MEDICAL BATTERIES WITHOUT FLUID.

A NEW SYSTEM. THE LATEST PROGRESS.

Galvanic Batteries - with DRY CELLS.
 Faradic Batteries - with DRY CELLS.
 Combination Batteries with DRY CELLS.
 Office Batteries - - with DRY CELLS.

Batteries that work for over Two Years

Without any change or attention or expense whatever.

Batteries that when used up may be refitted with entirely new cells at a nominal cost.

Fifty-Volt Batteries that weigh, complete, 11 lbs.,

And are good for upwards of two years of physicians' use.

Milliampere-Meter.

Electrodes.

J. A. PFARRE OF
 Geo. Tiemann & Co.,
President.
 R. P. Barrett, *Vice-Pres.*
 Claude Van Bibber, M.D.,
Secretary.
 Geo. Franke, *Treasurer.*
 Charles Willms,
Gen'l Manager.

R. P. Barrett, *Electrician.*
 John A. Barrett,
Consulting Electrician.

THE John A. Barrett Chloride of Silver Batteries.

READ A FEW EXTRACTS FROM WELL-KNOWN PHYSICIANS.

"I have had one of his batteries in use now for two years and have been more than pleased with it. I have used many kinds of batteries, but I think the Barrett Battery is by all odds the best, if not the only one worth having. No dirt, no continual refilling with acids, no getting out of order, and if the patient won't come to the battery, the battery can come to the patient."
 71 Marlborough St., Boston, Dec. 22, 1887.
 MORTON PRINCE.

"I take pleasure in stating that I have used your Chloride of Silver Battery some three years and that I am entirely satisfied with it."
 158 Montague St., Brooklyn, Nov. 21, 1887.
 LANDON CARTER GRAY, M. D.

"I have used your Galvanic Battery for more than a year and can testify to its great convenience and efficiency. It is the best portable battery that has come to my own notice."
 106 Marlboro St. Boston, Nov. 10, 1887.
 JAMES J. PUTNAM.

"I have for some time past used the Chloride of Silver Galvanic Batteries furnished by J. A. Barrett, and find them very satisfactory. The Dry Chloride of Silver Battery for portability, strength and constancy is the best I have ever used."
 514 Cathedral St., Baltimore, Nov. 17, 1887.
 F. T. MILES, M. D.

"It is now over two years since I bought my 50-Cell Barrett Battery of you. It may please you to know that after a constant well nigh daily use of it, I find it to-day the same clean, comfortable, trustworthy ally that it has been from the beginning."
 106 State St., Portland, Maine, Nov. 14, 1887.
 WALTER WOODMAN.

"My Battery has now been in daily use for two years, and has never failed me."

Saratoga, Nov. 5, 1887.
 W. H. HODGMAN.

IF YOUR DEALER HAS NOT

BARRETT'S CHLORIDE OF SILVER BATTERIES,

Write to THE JOHN A. BARRETT BATTERY CO.,

BALTIMORE, MD.

DIOVIBURNIA

A POWERFUL UTERINE TONIC AND ANTISPASMODIC.

The most **PERFECT** compound **EVER OFFERED** to the **MEDICAL PROFESSION** for the relief of the following female disorders: **DYSMENORRHOEA, AMENORRHOEA, MENORRHOEA, LEUCORRHOEA, SUBINVOLUTION, PUERPERAL CONVULSIONS, RELAXED condition of UTERUS and APPENDAGES and THREATENED ABORTION**; directing its action in a most remarkable manner to the entire **UTERINE** system as a general tonic and **ANTI-SPASMODIC**, and in cases of impaired vitality, *Complete Restoration follows its use.*

This happy combination is the result of an **EXTENSIVE PROFESSIONAL EXPERIENCE** **RUNNING THROUGH A SERIES OF YEARS**, in which the constituent parts have been **FULLY TESTED**, singly and in combination, in various proportions, until **PERFECTION** has been **ATTAINED**. We, with the profession, have no regard for secret remedies.

DIOVIBURNIA

is prepared for prescribing exclusively, and the Formula as given, will commend itself to every intelligent physician.

FORMULA.

VIBURNUM PRUNIFOLIUM, VIBURNUM OPULUS, DIOSCOREA VILLOSA, ALETRIS FARI-NOSA, HELONIAS DIOICA, MITCHELLA REPENS, CAULOPHYLLUM THALISTROIDES, SCUTELLARIA LATERIFLORA.

Every ounce contains $\frac{3}{4}$ dram each, of the fluid extracts. For further information see bottom of this page.

PALPEBRINE

A TRUSTWORTHY REMEDY IN EXTERNAL EYE DISEASES.

THE forms of disease for which this compound is highly recommended are the following: *Simple Conjunctivitis, Acute and Chronic Catarrhal Conjunctivitis, Vernal Conjunctivitis, Acute and Chronic Blenorrhoeal Conjunctivitis, Strumous or Scrofulous Conjunctivitis, Marginal Blepharitis and Inflammation of the Lachrymal Sac.*

PALPEBRINE is not a *secret* remedy, and in offering it to the general practitioner we give the formula in full. It contains no unknown and untried agents, but is composed of the following well-known drugs which will commend it to the profession at once.

FORMULA AND MEDICAL PROPERTIES:

ACIDUM BORACICUM, (an antiseptic)	-	-	-	-	-	One per cent.
HYDRAGYRUM BICHLORIDUM, (an antiseptic and irritant)	-	-	-	-	-	One part in 5,000.
TINCTURE OF OPIUM, (nerve tonic, slightly narcotic)	-	-	-	-	-	- A trace.
ZINCUM SULPHURICUM, (an irritant astringent)	-	-	-	-	-	One part in 1,000.
GLYCERINUM PURUM, (an irritant)	-	-	-	-	-	One part in 10.

EYE diseases are the best and most fruitful field for quackery, and the amount of harm being done by *quacks and patent medicines* in eye diseases is fearful to behold. In offering **PALPEBRINE** to the profession we wish to give to the busy practitioner a reliable and safe remedy, easily prescribed, of known qualities and quantities. We are certain after a trial our efforts will be appreciated.

TO any physician, unacquainted with the medicinal effects of **DIOVIBURNIA** and **PALPEBRINE**, we will mail pamphlet containing full information, suggestions, commendations of some of the most prominent practitioners in the profession, and various methods of treatment; also a variety of valuable prescriptions that have been thoroughly tested in an active practice, or to physicians desiring to try our preparations, and who will pay express charges, we will send on application a full size bottle of each free.

DIOS CHEMICAL COMPANY, ST. LOUIS, MO., U. S. A.

THE
AMERICAN MEDICAL DIGEST
 A MONTHLY EPITOME
 OF
MEDICAL LITERATURE AND SCIENCE.

This old established Magazine is claimed by the Medical Profession to be the most useful, as it is conceded to be the most popular Medical Journal published in America, presenting as it does each month in attractive and readable form, a skillfully condensed Digest of the best current Medical Literature of this Country and Europe, prepared directly for its pages by a corps of well known specialists, under able editorial supervision.

The issues of each year constitute a complete volume, in which is embodied a comprehensive record of the World's Medical and Surgical achievements during that period, concisely stated, carefully classified and extensively illustrated.

It is distinctively

A JOURNAL OF MEDICAL PROGRESS,

replete with information and practical suggestions that are invaluable to the busy practitioner, who would be compelled to search through the technical literature of the whole world to find the same facts outside of its pages.

The Physician by its aid is enabled to save time, labor and expense, in keeping himself thoroughly informed in all that is occurring in his profession which it would be useful for him to know, and its regular monthly appearance precludes all possibility of his falling behind his colleagues in familiarity with the progress of the period.

Its practical value is attested to by nearly Seven Years of successful existence, and the unflinching testimony of its extensive list of subscribers is that

NO DOCTOR CAN AFFORD TO BE WITHOUT IT

who is ambitious of occupying a creditable position in or near the front rank of his profession.

Determined to extend its field of usefulness to the furthest attainable limits, the management of THE AMERICAN MEDICAL DIGEST has at considerable expense brought new influences to bear upon its interests, which, without altering, will, it is believed, considerably expand its scope. All that it has been in the past it will continue to be, while new features will be added from time to time which will increase its utility and value.

Meanwhile the Subscription Price remains

\$2 PER YEAR.

payable in advance to the Publishers

The Analyst Publishing Company,
19 PARK PLACE,
NEW YORK.

BOUND VOLUMES FOR 1888.

Subscribers sending us the twelve numbers for 1888 with \$1, can have them returned handsomely bound. Any missing number will be supplied for twenty cents additional.

THE ANALYST-PUBLISHING CO.,

19 Park Place,

New York.

IMPORTANT REDUCTION IN PRICES OF THE *Fairchild Digestive Tablets.*

These special preparations of the Digestive Ferments have been from the outset favorably received by practitioners and patients.

During the past years they have been in constantly growing demand, and it is with much satisfaction that we now announce that, owing to their extensive use, we are able to offer these preparations at prices which render them freely available.

The Fairchild Digestive Tablets are now placed in the hands of dispensing pharmacists at an average reduction of twenty-five per cent. on the entire list of these preparations.

The special value of these Tablets lies in their convenience, accuracy and agreeability of dosage. They are dispensed in small vials, which may be conveniently carried in the pocket, and are thus available at such intervals prior to or during the progress of digestion as may seem best to the prescriber.

By this means, pepsine, for instance, may be exhibited in small doses at frequent intervals after the ingestion of food—a rational method of reinforcing the peptic digestion.

The pancreatic ferments may be thus given before meals, or after the gastric activity has diminished and thus the best results may be, upon accepted physiological grounds, reasonably anticipated in the treatment of intestinal indigestion.

Both peptic and pancreatic tablets are made in such combinations as are found most serviceable and proper by practitioners.

Pepsine and Bismuth may be especially referred to as being a perfectly compatible preparation; as in this combination we have sub-nitrate of bismuth which is not open to the objections made against ammonia-citrate, the salt of bismuth resorted to in liquid preparations of "pepsine and bismuth."

The compound Pancreatic Tablets are well thought of in the treatment of intestinal indigestion, being especially devised for this purpose—containing 2 grains of Pancreatic Extract, 3 grains Squibb's bismuth sub-nitrate and 1-10 grain powdered Ipecac in each Tablet.

Complete lists and descriptions will be cheerfully sent upon application.

FAIRCHILD BROS. & FOSTER,
Makers of Original and Reliable Preparations of the Digestive Ferments,
NEW YORK and LONDON.



THE

AMERICAN MEDICAL DIGEST

ISSUED IN
MONTHLY PARTS

VOL. VIII. FEBRUARY 15, 1889. PART 2.

TWO DOLLARS A YEAR.

INDEX ON PAGE 2.

EDITED BY

JOHN C. LESTER, A.M., M.D.

COLLABORATORS.

ALEXANDER J. C. SKENE, M.D.,

Professor of the Medical and Surgical Diseases of
Women and Diseases of Children, Long
Island College Hospital; Professor
Gynecology at N. Y. Post-
Graduate Med. School.

ARTHUR MATHEWSON, M.D.,

Professor of Ophthalmology, Long Island College
Hospital; Surgeon to Brooklyn Eye
and Ear Hospital.

LANDON CARTER GRAY, M.D.,

Professor of Nervous and Mental Diseases, N. Y.
Polyclinic.

BENJ. F. WESTBROOK, M.D.,

Chief of Dept. Diseases of Chest, at St. Mary's
Gen. Hospital.

A. H. BUCKMASTER, M.D.

F. R. STURGIS, M.D.,

Professor Venereal Diseases, N. Y. Post-Graduate
Med. School; Ex-President N. Y. County
Medical Society; Visiting Surgeon
to Charity Hospital.

GEORGE HENRY FOX, M.D.,

Clinical Professor of Diseases of the Skin, College
Physicians and Surgeons, New York.

CHARLES JEWETT, M.D.,

Professor Obstetrics, Long Island College Hospital,
ex-President Kings County Medical Society.

A. H. P. LEUF, M.D.,

Demonstrator of Anatomy and Histology and
Lecturer on Pathology at the Pennsylvania
School of Anatomy and Surgery.

R. G. ECCLES, M.D.

NEW YORK:

ANALYST PUBLISHING CO.
19 Park Place.

Entered at the Post Office at New York, N. Y., as second-class matter.
Copyrighted, 1889, by the American Medical Digest Publishing Company.

LACTOPEPTINE.

The most important Remedial Agent ever presented to the Profession for

Dyspepsia, Vomiting in Pregnancy, Cholera Infantum, Constipation, and all Diseases arising from Imperfect Nutrition.

LACTOPEPTINE precisely represents in composition the natural digestive juices of the Stomach, Pancreas and Salivary Glands, and will, therefore, readily dissolve all foods necessary for the recuperation of the human organism.

LACTOPEPTINE

IS COMPOUNDED WITH

Gentian, Iron, Strychnia, Bismuth, Quinia, Calisaya,
Cinchona and Phosphates,

And various Medications required in general Practice in the form of
ELIXIRS, SYRUPS, LIQUIDS, Etc.

Special Notice to the Medical Profession.

Whenever satisfactory results are not obtained from the administration of **Lactopeptine** we will consider it a favor if such facts are reported to us, for there can be no doubt that substitution of Pepsin or some of the cheap imitations of Lactopeptine has been practised, whenever the therapeutic activity of Lactopeptine is not uniformly demonstrated in its indications. *Send address for our new MEDICAL ALMANAC, containing valuable information.*

THE NEW YORK PHARMACAL ASSOCIATION.

Box 1574.

NEW YORK.

SUCCUS ALTERANS.

(McDADE.)

SUCCUS ALTERANS is a purely vegetable compound of the preserved juices of *Stillingia Sylvatica*, *Lappa Minor*, *Phytolacca Decandra*, *Smilax Sarsaparilla* and *Xanthoxylum Carolinianum*, as collected by DR. GEO. W. McDADE exclusively for ELI LILLY & Co., and endorsed by DR. J. MARION SIMS.

SUCCUS ALTERANS continues to gain favor from its remarkable Alterative and Tonic properties, *eliminating specific poison from the blood and increasing the proportion of red corpuscles in anæmic patients* to a wonderful degree; is endorsed by the medical profession and in use by many hospitals of note.

SUCCUS ALTERANS in venereal and cutaneous diseases is fast supplanting Mercury, the Iodides and Arsenic; and is a certain remedy for Mercurialization, Iodism and the dreadful effects often following the use of Arsenic in skin diseases.

SUCCUS ALTERANS is also strongly recommended for its Tonic and Alterative effects in myriad forms of scrofulous disease, and in all cases where anæmia is a factor. Such patients rapidly develop a good appetite, sleep soundly and gain flesh rapidly. Many cases are on record where patients increased ten to twenty-five pounds in weight in a few weeks.

SUCCUS ALTERANS is giving satisfactory results in treatment of *Chronic Rheumatism* and can be used with confidence.

SUCCUS ALTERANS may be given for any length of time, without injury to the patient.

SUCCUS ALTERANS is put up in pint round amber bottles and *never in bulk*.

PHYSICIANS who have not received DR. McDADE's latest publication, the *MONOGRAPHIA SYPHILITICA*, should send their address, mentioning this journal, and we will mail a copy. It contains a paper, illustrated with colored plates, by DR. D. H. GOODWILLIE, of New York, on the "Sequelæ of Syphilis," reports of cases in practice and many other valuable papers.

ELI LILLY & CO., Pharmaceutical Chemists,
Indianapolis, Ind., U. S. A.

SUPPLIED BY ALL DRUGGISTS.

L. C. HOPKINS, President.

JNO. J. DONALDSON, Vice-Prest. and Treas.

DR. JAEGER'S Sanitary Woolen System Company,

827-829 BROADWAY, NEW YORK.

BRANCH STORES: *

199 BROADWAY, New York,

366 FULTON STREET, Brooklyn.

(Western Union Building.)

THIS COMPANY, APPRECIATING the generous support which it has received during the past year, and REGARDING the oft-expressed hope that the prices of its goods might be brought within the ability of all buyers, has made a

GENERAL REDUCTION OF 25 PER CENT.

from the present Catalogue Prices, Shoes only excepted. THIS REDUCTION is made by the Company at all its Stores, as well as by all its Representatives, whose names will be found in its Catalogue. The COMPANY assures its patrons that the present **STANDARD OF EXCELLENCE** in its manufactures, will be maintained.

In addition to our complete assortment of *Underwear* and *Outer-clothing* for men and boys, we remind our patrons to our **LADIES' SANITARY UNDERVESTS, CHEMISES, DRAWERS, COMBINATION SUITS, NIGHT DRESSES, AND UNDERSKIRTS. THE CHILDREN'S VESTS, DRAWERS, COMBINATION SUITS, NIGHT DRESSES, SLEEPING COMBINATION SUITS, WITH AND WITHOUT FEET,** are made of the Best Stockinet Material, in White and Natural Color, and of DOUBLE THICKNESS OVER THE CHEST AND VITAL ORGANS. We add to these our *warm, soft and beautiful CAMEL-HAIR Double Faced Velour DRESSING GOWNS, SMOKING JACKETS and CAMEL-HAIR BATH ROBES*, in great variety.

Catalogues containing descriptions, illustrations, samples of materials, and a full price list, free by mail. Orders for goods, by mail or express, and letters of inquiry, should be addressed to

Dr. JAEGER'S SANITARY WOOLEN SYSTEM COMPANY,

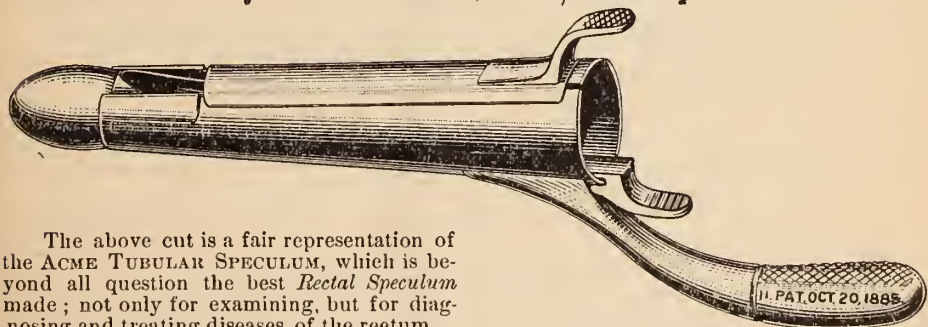
827 and 829 Broadway, New York.

New York, Nov., 1885.

THE IMPROVED ACME TUBULAR SPECULUM.

Patented Oct. 20, 1885.

Manufactured by G. W. POWELL, M. D., Sole Proprietor of Patent.



The above cut is a fair representation of the ACME TUBULAR SPECULUM, which is beyond all question the best *Rectal Speculum* made; not only for examining, but for diagnosing and treating diseases of the rectum.

The tube is made of Phosphor Bronze, a flexible, tough and elastic metal, and its walls are so thin as to give for observation and operation, the greatest possible amount of space with the least amount of distention of the sphincters. The entering end of the tube is closed by a short conical removable plug, which is manipulated by a flat stem which lies along the inner surface of the tube. This plug may be withdrawn, after the speculum is inserted, for examining and treating parts above the end of the tube, or it may as conveniently be left in place while dealing with tissue through the slot of the tube.

The slot is closed by a slide which may be withdrawn to any extent desired by the operator; the slot may be widened or narrowed to meet the demands of each case, this is readily accomplished and its widened or narrowed capacity secured as needed, by means of the handles and the nuts on the cross bar. Thus it will at once be seen that the speculum may be used either with closed or opened end, and its slot running the entire length of the tube may be opened to any width bearable to the patient, while at the same time the sphincters are held entirely out of the way and uniformly supported.

No other speculum enables the surgeon to accomplish so much, and being so easy and painless to the patient, the success of the operator depends greatly on having a speculum in which treatment can be properly applied. Price, \$5. Address,

Dr. G. W. POWELL, Moriah, N. Y.

INDEX.

MEDICINE.

	PAGE		PAGE
Air Passages—Myrtol for.....	32	Indigestion and Flatulence—Prescription for.....	27
Bronchitis—Prescription for, Livezy.....	31	Narcotic Poisoning—Strychnine in.....	22
Carlsbad Salts—Artificial.....	18	Neuralgia—Butyl-Chloral in.....	26
Cough Mixtures.....	29	Night-Sweats—Chloral-Hydrate in.....	32
Cough—Winter, Prescription for.....	32	Oatmeal—Bartholow on.....	27
Creasote—Formula for.....	18	Pharyngitis—Gargle for Acute.....	31
Dementia—Secondary, Dr. Clouston on.....	24	Phthisis—Vocal Music in.....	31
Diphtheria—Prescription for.....	18	Physical Diagnosis—Acoustics in.....	29
“ Rieck's Treatment of.....	17	Pleurisy—Prescriptions for.....	19
“ Vlemingx's Solution for.....	17	Rheumatism—Dr. Pollock on.....	20
Gastric Cough—Treatment of, Bull.....	27	Stomach Milk—Curdling Ferment of.....	27
“ Juice—Chemical Testing.....	28	Teeth Gargle to prevent loosening.....	18
Hemiplegia—Dr. Jackson on.....	26	Urechites Suberecta.....	19
Hiccough—Treatment of.....	31		

SURGERY.

	PAGE		PAGE
Anal Fistula—Rapid Cure.....	22	Hair—Pomade for.....	30
Anatomical Diagrams—Easy Method of Producing..	20	Head Injuries—Diagnostic Value of Hemorrhage from Ear.....	31
Antiseptic Gauze.....	22	Hernia—Macewen's Method.....	22
Bladder—Operation for New.....	26	Narcosis—New Method of Mixed.....	20
Clavicle—Supra-Acromial Dislocation.....	17	Orbit—Hydatid Cyst of.....	32
Corns—Subplantar—Removal of.....	29	Penis—Method of Amputation.....	27
Deafness—New Operation for.....	30	Psoriasis—Treatment of, Shoemaker.....	27
Empyema—Treatment of.....	9	Rubber Drains—Disinfection and Tempering.....	21
Eyes—Hygiene of.....	32	Varicose Veins—Local Treatment.....	21
Gonorrhea.....	24		
“ Compound Infection.....	25		

DISEASES OF WOMEN AND CHILDREN, AND OBSTETRICS.

			PAGE
Abortion—Dr. Leuf on.....	31	Menstrual Organ—Johnston on.....	18
Cæsarean Sections—Porro and Sanger.....	31	Menstruation—Irregular.....	23
Cyst—Recurrent Intraligamentary ..	20	Oophoralgia—Intra-Uterine Faradisation.....	22
Childhood—Errors of Diet in, Bartley.....	26	Pelvic Peritonitis.....	19
Children—Cerebral Palsies of.....	24	Scarlet Fever and Heart Disease—Relations of.....	23
Disinfectant of St. Thomas Hospital.....	31	Sterility—Parvin on.....	22
Encephalocele—Case of.....	29	Vaginal Mucus—Effect of Glycerine on.....	23
Forceps—A cause of Idiocy.....	32	Vaginitis—Specific.....	22
Galactorrhœa.....	31	Uterus—Anteflexion of, Thomas on.....	17
Book Notices.....			iv

DOCTOR, Do you want to buy or sell a
PRACTICE OR DRUG STORE?

PARTNERS, ASSISTANTS and SUBSTITUTES furnished. Some fine locations for sale. Send full particulars with stamp to

Dr. E. G. JONES,
372 Union Avenue. PATERSON, N. J.

Specify "Battle" when Prescribing Our Preparations.

BROMIDIA

THE HYPNOTIC.

FORMULA.—

Every fluid drachm contains 15 grains EACH of Pure Chloral Hydrat. and purified Brom. Pot., and one-eighth grain EACH of gen. imp. ext. Cannabls Ind. and Hyoscyam.

DOSE.—

One-half to one fluid drachm in WATER or SYRUP every hour, until sleep is produced.

INDICATIONS.—

Sleeplessness, Nervousness, Neuralgia, Headache, Convulsions, Colic, Mania, Epilepsy, Irritability, etc. In the restlessness and delirium of fevers it is absolutely invaluable.

IT DOES NOT LOCK UP THE SECRETS.

PAPINE

THE ANODYNE.

Papine is the Anodyne or pain-relieving principle of Opium, the Narcotic and Convulsive Elements being eliminated. It has less tendency to cause Nausea, Vomiting, Constipation, Etc.

INDICATIONS.—

Same as Opium or Morphia.

DOSE.—

(ONE FLUID DRACHM)—represents the Anodyne principle of one-eighth grain of Morphia.

BATTLE & CO.,

CHEMISTS' CORPORATION,

BRANCHES:

76 New Bond Street, London, W.

5 Rue de la Paix, Paris.

9 and 10 Dalhousie Square, Calcutta.

ST. LOUIS, MO.

Specify "Battle" when Prescribing Our Preparations.

The only prominent Emulsion of Cod-Liver Oil introduced directly to the medical profession
It is advertised exclusively in medical journals.

HYDROLEINE.

(HYDRATED OIL.)

Produces rapid increase in Flesh and Strength.

FORMULA.—Each Dose contains:

Pure Cod Liver Oil.....40 gr. (drops)	Soda.....1-2 Grains
Distilled Water.....25 "	Salicylic Acid.....1-4 "
Soluble Pancreatin.....5 Grains.	Hydrochloric Acid.....1-10 "

Recommended and Prescribed by
EMINENT PHYSICIANS Everywhere.
It is pleasant to the Taste and
acceptable to the most delicate Stomach.

IT IS ECONOMICAL IN USE AND CERTAIN IN RESULTS.

HYDROLEINE (Hydrated Oil) is not a simple alkaline emulsion of oleum morrhuae, but a hydro-pancreated preparation, containing acids and a small percentage of soda. Pancreatin is the digestive principle of fatty foods, and in the soluble form here used, readily converts the oleaginous material into assimilable matter, a change so necessary to the reparative process in all wasting diseases.

The following are some of the diseases in which **HYDROLEINE** is indicated:

Phthisis. Tuberculosis, Catarrh, Cough, Scrofula, Chlorosis,

General Debility, etc.

TO BRAIN WORKERS of all classes, **HYDROLEINE** is invaluable, supplying as it does, the true brain-food, and being more easily assimilated by the digestive organs than any other emulsion.

The principles upon which this discovery is based have been described in a treatise on "The Digestion and Assimilation of Fats in the Human Body," and "Consumption and Wasting Diseases," by two distinguished London physicians, which will be sent free on application.

SOLD BY DRUGGISTS GENERALLY.

C. N. CRITTENTON,

SOLE AGENT FOR THE UNITED STATES.

116 FULTON STREET, N. Y.

A Sample of Hydroleine will be sent free upon application, to any physician (enclosing business card) in the U. S.

A NEW USE FOR Liquid Peptonoids.

Successfully used in Dissolving the False Membrane in Diphtheria.

A Physician writes : " In an experience of over thirty years I have never used any thing to equal your **LIQUID PEPTONIDS** as a local application with a spray. It will dissolve the membrane and destroy the diphtheretic odor in less than twenty-four hours. I use the **LIQUID PEPTONIDS** full strength as a spray, two or three times a day, in bad cases."

Used successfully by another physician in two desperate cases :

" I was induced to try **LIQUID PEPTONIDS** in two very desperate cases of **DIPHTHERIA**. I think I never saw throats more heavily coated with exudate than were these, and I think I never saw it more rapidly disappear than in these cases, by frequent spraying with your **LIQUID PEPTONIDS**."

LIQUID PEPTONIDS can be taken by patients unable to ingest food in any other form. In *dyspepsia* and *loss of appetite* its effects are positive, its digestive properties assisting in the digestion of food taken and its peptogenic properties quickly stimulating the natural digestive secretions of the stomach.

Pancrobilin.

Prepared (in both Liquid and Pill form) from Extract of Pancreas and Bile.

This preparation is designed expressly to increase the digestion and absorption of fats.

We believe that the fat-digesting properties of pancreatine and bile are inseparable, and that without their union in the intestinal tract but little, if any, fat would be digested and absorbed.

PANCROBILIN will be found of great service in *Phthisis* and other wasting diseases, *Nervous Prostration*, *Constipation*, *Inanition*, *Malnutrition*, *Intestinal Indigestion* and wherever there is a failure to assimilate fats.

If the skin is first wet with **LIQUID PANCROBILIN**, the inunction of oils will be greatly facilitated.

LIQUID PANCROBILIN is put up in pound bottles.

PILL PANCROBILIN is put up in bottles holding 100 pills. The coating of the pills will resist acid digestion when given as directed, but will be quickly dissolved in the alkaline secretions of the duodenum.

Phospho-Caffein Comp.

(Granular Effervescing.)

Formula for each dessertspoonful :—

Caffen.

Acidi Phosphorici 33, grains, ss.

Antipyrin.

Ext. Apii. Grav. dulc. (Celery), 33 grains, i.

Sodium Bromide, grains, v.

The satisfactory results produced by **PHOSPHO-CAFFEIN COMP.** in *Headaches*, *Neuralgia*, *Insomnia*, *Neurasthenia* and *general Nervous Irritability*, are not due to the effect of any one ingredient, but to the happy effect of the combination. A thorough series of comparative tests have demonstrated the superiority of the above formula over any other in the market.

REED & CARNRICK, New York.

An Important Communication TO PHYSICIANS.

Thirteen years have now elapsed since the introduction of SCOTT'S EMULSION of PURE NORWEGIAN COD LIVER OIL with HYPOPHOSPHITES of LIME and SODA, since which time its growth and development have been very large, not only in this country but in South America, Great Britain and a large part of Continental Europe, and it has, in a very large degree, supplanted the Plain Cod Liver Oil. Its success is largely due to the happy combination of all its components, making a perfect chemical union, that will not separate for years, which we believe is not true of any other Cod Liver Oil preparation.

The innumerable reports from Physicians, of the brilliant results obtained justifies the statement that in almost every case where Cod Liver Oil is indicated, the combination of Cod Liver Oil with the Hypophosphites as prepared in Scott's Emulsion is infinitely superior.

Physicians who have never tried this Emulsion, or who have been induced to try something else in its stead, will do us the favor to send for sample, and we know they will always use it in preference to plain Cod Liver Oil or any other preparation.

We also call your attention to the following preparations :

CHERRY-MALT PHOSPHITES.

A combination of the tonic principles of Prunus Virginiana, Malted Barley, Hypophosphites of Lime and Soda, and Fruit Juices. An elegant and efficient brain and nerve tonic.

BUCKTHORN CORDIAL (Rhamnus Frangula.)

Prepared from carefully selected German Buckthorn Bark, Juglans Bark, and Aromatics. The undoubted remedy for Habitual Constipation. Send for samples of the above—delivered free.

SCOTT & BOWNE, Mfg. Chemists, 132 & 134 S. 5th Ave., N. Y.

Electro-Medical Apparatus.

Special attention is hereby called to my new and improved

CAUTERY BATTERY.

Its advantages are: its simple construction, perfect operation, low price, and durability. I will furnish this Battery complete and ready for use, for \$18, including the following attachments, viz.: Handles and Cords, 1 Knife, 1 Point, 1 Eraseur. Over 200 now in successful operation in New York City. All Batteries guaranteed for 1 year. Address

MENO FEDDERN,

Park Ridge, Bergen Co., New Jersey.

I will gladly call and exhibit my Batteries at the office of any physician residing in New York or vicinity.

Send for

CLUB RATES on

MEDICAL JOURNALS

To ANALYST PUBL'G CO.,

19 Park Place, N. Y.

THE BEST OF AMERICAN.

Specify

PLANTEN'S CAPSULES.

Known as Reliable over 50 years for "General Excellence."

Established 1836.

H. PLANTEN & SON, 224 William Street
NEW YORK.

SOFT and HARD CAPSULES

FILLED, OF ALL KINDS.

Nine Sizes: 3, 5, 10 and 15 Min. and 1, 2½, 5, 10 & 15 Gram.

NEW KINDS:

WINTERGREEN, APIOL,

Sandalwood, Erigeron, Terebene, Etc.

Improved. Empty, 8 sizes.

Capacity in Grains: 12, 10, 5, 4, 2, 1, ½, ¼.

For taking medicines free of taste, smell, injury to the teeth, mouth or throat.

Rectal, Vaginal, Horse, For Liquids

3 Sizes, 6 Sizes, 6 Sizes, 8 Sizes.

Trial box of all above Emptys, by mail, 25 cents,

Capsules for Mechanical Purposes.

New Articles, and Capsuling Private Formule, a Specialty. Sold by all Druggists. Samples free.

Specify PLANTEN'S on all orders.

MEDICAL PRACTICES AND DRUG
Stores, Bought and Sold. Lists Free.
Address: THE MEDICAL TRANSFER BUREAU,
Lynn, Mass.

8th YEAR OF PUBLICATION.

SUBSCRIBE FOR The American Medical Digest,

Price, \$2.00 per Annum.

It is the most popular Medical Journal issued, as it presents monthly, in a very attractive and readable form, a digest of the best current Medical Literature of this country and Europe, embellished with numerous wood cuts, and edited by well-known and distinguished writers.

In a review, Dr. Henry Reynolds says: "The American Medical Digest" presents a digest of the best current medical literature of this country and Europe. The most important and practical medical news and discoveries are brought in an available form to the attention of the busy practitioner with slight demands upon his time. It is one of the most valuable medical publications extant. Few publications, if any, so completely cover the whole field of medicine and surgery as does the "American Medical Digest," and the practitioner who can take but few medical journals should certainly subscribe for this one.

A Few Extracts From Letters Received.

OFFICE OF COLLEGE OF PHYSICIANS {
AND SURGEONS, CHICAGO, ILL. }

* * but am so much pleased with it that I want to continue taking it, and want it to continue. * *

Yours, respectfully, A. REEVES JACKSON,
President—Professor of Surgical Diseases of Women,
and Clinical Gynaecology.

INDIANAPOLIS, IND.

* * I am well pleased with your Journal, and remarked the other day to a fellow practitioner that I had taken the "American Journal of Obstetrics" for the past seven years, was taking the Journal of the "Am. Med. Ass'n," the "New York Med. Journal," the "Archives of Pediatrics," the "Independent Medical Investigator," the "Physio. Med. Jour. of Ind.," and the "Am. Medical Digest," and if I were compelled to give up all but one, I should hold to the Digest. * *

C. T. BEDFORD, Prof. Obstetrics, Gynaecology,
and Diseases of Children.

* * I like your Digest better than any other publication.
J. K. BAUDUY, M.D.

* * I don't want to be without the Digest. * *
R. D. ELLIOTT, M.D.

* * It is just what I have been waiting for and expected to "die without the sight." * * * We do need something like your publication. I admire its large clear type, and the general beauty of its make-up.
JAMES P. HASSLER, Surgeon.

* * I think it is one of the best medical Journals published—short and to the point.
PHILIP SATTLER, M.D.

I am much pleased with the publication, and see in it a very valuable journal for ready reference to the busy practitioner
Very resp'y yours, M. B. FOLWELL.

* * I regard it as the cream of medical literature.
J. P. OLIVER, M.D.

* * I like its looks and character very much.
ARBA R. GREEN, M.D.

* * It is an excellent work.
P. H. STRONG, M.D.

* * I think there is more to be learned from the Digest than any other Journal I ever saw, at so small a price.
F. J. COOPER, M.D.

* * I like your Journal and consider me a permanent subscriber.
Yours truly, D. B. HAND, M.D.

135 LEXINGTON AVE., N. Y. CITY.

* * The Medical Digest is good. I like it very much.
Very respectfully yours, J. W. BARSTOW.

ELKTON, VA.

* * I do not think I can afford to be without the Digest.
C. C. GENTRY, M.D.

CORONER'S OFFICE, FLUSHING, N. Y.

* * The Digest, without any exception, is the most useful periodical I ever saw. H. J. MAYNARD, M.D.

JANESVILLE, WIS.

* * Think it is just the thing we need
DRS. G. W. CHITTENDEN & SON.

RICHMOND, IND.

* * I think it contains more valuable matter than I ever received for so little money.
F. F. DWIGGINS, M.D.

EDENBORO, PA.

* * The Digest meets the wants of the general practitioner more completely than any other Journal I know of.
F. G. GREENFIELD.

TROY, N. Y.

* * Again compliment you on the good judgment exhibited in the departments of your Journal, &c., &c.
E. J. FISK, M.D.

TREMPLEALEAN, WIS.

* * The Digest pleases me more than any medical publication I have ever seen; every inch is readable.
C. H. CUTLER, M.D.

WACO, TEXAS.

* * I am exceedingly pleased with the Digest.
Respectfully, H. A. SPEAR, M.D.

EATONTON, GA.

* * We are very much pleased with the Digest.
DRS. ETHERIDGE & ETHERIDGE.

BLAIRSTOWN, N. J.

* * Renew my subscription to the Digest. * *
I have formerly read its pages with interest and profit.
MILTON M. ARMSTRONG, M.D.

BELIE VERNON, PA.

* * I consider the Digest a valuable acquisition to medical science.
ANDREW GUILER, M.D.

BRIDGEPORT, CONN.

* * The Digest is indispensable.
F. J. YOUNG, M.D.

NORWAT, ME.

* * Could not be without the Digest any way.
FRANK H. TILTON, M.D.

AKRON, OHIO.

* * I feel that I can not get along without it.
L. S. EBWIGHT, M.D.

THE
AMERICAN MEDICAL DIGEST

ISSUED IN MONTHLY PARTS.

FEBRUARY 15, 1889.

A DIGEST OF CURRENT MEDICAL LITERATURE,
ABSTRACTS AND REVIEWS; IN THREE PARTS:
MEDICINE,—SURGERY,—DISEASES OF
WOMEN AND CHILDREN,
AND OBSTETRICS.

PART I.

MEDICINE.

THE NEW HYPNOTIC SULFONAL-BAYER.

SULFONAL was discovered by Prof. Eugen A. Baumann, of Freiburg University, and was first prepared by the Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld.

SULFONAL (Diethylsulfonyldimethylmethan) is in the form of colorless prisms, odorless and tasteless, melting at 125.5° C. (258° F.) and has the composition $(C_2H_5)_2C=SO_2$. It is slightly soluble in cold water, but easily soluble in hot water or alcohol.

SULFONAL was first examined as to its physiological and pathological effects by Prof. A. Kast, of Freiburg University, and its hypnotic action was discovered and studied by him.

Since then SULFONAL has been the subject of numerous trials and experiments by many eminent and experienced physicians. Their testimony is unanimously favorable, and the conclusions reached by them are as follows:

SULFONAL is a prompt and reliable hypnotic which in proper doses produces quiet, natural sleep, lasting a number of hours.

SULFONAL has no unfavorable effects on the heart and the circulation, nor on the temperature, the pulse, or the respiration.

SULFONAL produces no disagreeable secondary symptoms; the patients with very few exceptions awake from their sleep feeling strong and greatly refreshed.

SULFONAL does not interfere with the process of digestion.

SULFONAL is a hypnotic, and not a narcotic; it acts by giving rest to the cells of the cerebral cortex, thereby causing sleep.

SULFONAL does not create an unconquerable desire for its repeated use; there is no danger of a SULFONAL-habit. Neither is it necessary to increase the dose after long-continued use.

SULFONAL is best administered at supper time, dissolved in hot liquids, *e. g.*, a bowl of soup or broth, a cup of milk, tea, coffee, cocoa, etc.

These points will be found to be fully exhibited in the series of contributions contained in our pamphlet, which will be mailed on application.

SULFONAL-BAYER is supplied by us in half-ounce and one-ounce vials.

We prepare 5-grain and 15-grain Tablets of Sulfonal-Bayer. The Tablet form is admirably adapted to the purpose of administering this drug, as when they are placed in the liquids, they disintegrate and are thus received into the system.

We also put up Sulfonal-Bayer in the form of our Soluble Pills, containing five grains each.

THE NEW ANTIPYRETIC PHENACETINE-BAYER.

Phenacetine-Bayer (Para-Acetphenetidine) is a white, glossy, crystalline powder, perfectly tasteless, melting at 135° C.—307° F. and has the composition $C_8H_9NO_2$.

It is slightly soluble in water, a little more soluble in glycerine, but most freely in alcohol.

Phenacetine-Bayer was first prepared by the Farbenfabriken, formerly Friedr. Bayer & Co., Elberfeld, and is of absolute purity and uniform quality.

Summarizing the superiority of Phenacetine-Bayer over other antipyretics and antineuralgics, the following conclusions are formed.

1. Phenacetine-Bayer is an efficacious antipyretic.
2. It does not develop any disagreeable or noxious after effects.
3. The dose required is half that of Antipyrine.
4. It is perfectly tasteless.
5. On account of its innocuousness and tastelessness, it is a valuable antipyretic both in adults and in children.
6. Phenacetine-Bayer is an important antineuralgic; its effect is more energetic than that of Antipyrine and does not cause lassitude or any other disagreeable symptoms.

Our Pamphlet on Phenacetine-Bayer, containing the valuable testimony of eminent physicians will be mailed on application.

We offer Phenacetine-Bayer in one-ounce vials, or in the form of our Soluble Pills of the strength of two and four grains to each pill.

W. H. SCHIEFFELIN & CO.,
170 & 172 WILLIAM STREET, NEW YORK,

Sole Licensees and Sole Agents for the United States.

Please mention the MEDICAL DIGEST.

CONSTITUTIONAL DISEASES.

Rieck's Treatment of Diphtheria.

FROM the Berlin correspondence of the *Medical and Surgical Reporter*, we extract the following:

Dr. Rieck's proposal to treat diphtheria with yeast, though theoretically interesting, will find but little appreciation with the practitioner of medicine. Rieck's treatment is based on the fact that the gastric contents in diphtheria, just as in cholera, scarlet fever and measles is always alkaline. The yeast cells—*cerevisiæ*—proliferate only in a neutral or slightly alkaline soil, which at the same time contains sugar. They furnish carbonic, acetic and lactic acids. The latter acid has been extensively used in the treatment of diphtheria, though rarely ever in quantity sufficient to acidify the gastric contents. If lactic acid is pushed that far the proliferation of the yeast cells stops simultaneously with the reduction power of the micro-organisms, and recovery takes place. The proposal is, in other words, an attempt to combat the specific diphtheria germs with proliferating heterogenous cells—a fight between bacillus and cell on a common soil, the blood. The method constitutes, therefore, an experiment the reverse of a pure culture.

Another suggestion regarding the treatment of diphtheria, made by Dr. Gaucher, of Paris, to cauterize the deposits with the Paquelin cautery, will not be received with greater enthusiasm than Rieck's proposal. Gaucher has saved 17 cases by this method, and Dubousquet has treated 81 cases with a mortality of only five per cent. Gaucher's method, by the way, is nothing new, for a German physician proposed the same treatment in 1885. Your correspondent in that year assisted Professor Henoch, of the Royal Charité, in the cauterization

of deposits in a grave case in a girl thirteen years old. The girl recovered and as Professor Henoch thought only as the result of this treatment. Nevertheless, the cauterization treatment has never been adopted by Professor Henoch nor by any other German pediatricist. It is clear, that this treatment can only be of avail in the initial stage of the affection, before the specific germs have entered the circulation. Besides, the treatment is undoubtedly too heroic ever to become popular.

Vlemingcx's Solution in Diphtheria.

VLEMINGCX's solution has long been known in the treatment of disease of the skin as a very active agent in certain cases. Dr. George E. Hubbard states in the *Medical Record* that he uses the clear solution undiluted by means of a spray, in cases of diphtheria, every half hour until the disease is under control and then at longer intervals. He states that under the use of this solution in spray, even sparingly applied, the diphtheritic patches undergo a change in a few hours. The temperature soon subsides, and a general improvement in the condition takes place almost from the first application. In some cases the patches disappear entirely in a day. If the false membrane has developed rapidly before the physician has seen the patient, under the influence of the spray, it will be effectual even then in arresting systemic poisoning, and sooner or later the tough membrane will detach itself. Do not by any means allow the patient to swallow any portion of the false membrane.

We append the formula for the preparation of this solution. It is as follows: \mathcal{R} . Calcis, \mathfrak{z} ss; sulfuris sublimati, \mathfrak{z} j; aquæ, \mathfrak{z} x. M. Coque ad \mathfrak{z} vj et filtra.

The boiling of this must be carefully done over a water bath in a graduated

vessel. The filtration must also be closely watched, and the filtrate should be perfectly clear.—*St. Louis Medical and Surgical Reporter.*

Prescription for Diphtheria.

WE have used for many years the following gargle with marked relief to the patient. \mathcal{R} . Tr. ferri chl., \mathfrak{z} ii; ol. gaulth., m. xx; spts. ether. nit. \mathfrak{z} i; glycerine, \mathfrak{z} ss; sat. sol. kali chl., ad \mathfrak{z} iii. M. Sig. Dilute with equal parts of water and use as a gargle, or apply with a camel's hair brush.

Formula for Creasote.

DR. KEFERSTEIN gives some formula in the *Therapeut. Monatshefte*, which have proved useful in his practice. The following formula, he says, gives a clear mixture which tastes and smells decidedly better, and is also cheaper, than the formula suggested by Bouchardat, which contains Malaga wine:

\mathcal{R} . Creasoti, \mathfrak{M} xx; spir. vini rectificat, f \mathfrak{z} vi $\frac{1}{3}$; aq. cinnamomi, f \mathfrak{z} iiiss; syr. cinnamomi f \mathfrak{z} vi $\frac{1}{3}$. M. Sig. A tablespoonful three times a day, increasing one tablespoonful weekly.

The following formula is for administration of the creasote in pill form: \mathcal{R} . Creasoti, \mathfrak{z} i; powd. althea root, \mathfrak{z} iss; licorice juice f \mathfrak{z} iss; mucilage of acacia, q. s. ut fiant pil. No. 120; coat with gelatine. Sig. Six pills three times a day.

When there is much cough and diarrhea, the following may be given: \mathcal{R} . Creasote, gr. xv; acetate of lead, opium (pure) \mathfrak{aa} gr. ivss; licorice juice, f \mathfrak{z} iss; mucilage of acacia, q. s. ut fiant pil. No. 50. Sig. Five pills three times a day. Five pills contain one and one-half minims of creasote.

Instead of giving the creasote in cod liver oil, Keferstein has the following emulsion made, which can be taken even

by children: \mathcal{R} . Creasoti, \mathfrak{M} xx; solve in olei amygdalæ, f \mathfrak{z} viiss; pulv. acaciæ, \mathfrak{z} v; aq. destil, f \mathfrak{z} iiiss. M. Ft. emulsio. Adde, tinct. aurant. comp., \mathfrak{M} xv; oleosach. menth. pip., f \mathfrak{z} i. M. Sig. A tablespoonful from two to five times a day.

In the case of children it will be sufficient to make up half the quantity, and give a teaspoonful of it at a time. One tablespoonful of this emulsion contains one and one-half minims of creasote. If the taste of oil is detected, black coffee may be given after it.

The following formula is suitable for giving creasote in the form of drops: \mathcal{R} . Creasoti, \mathfrak{M} xl; tinct. cinnamomi, f \mathfrak{z} viiss. M. Sig. Fifty drops three times a day, or one-half teaspoonful in a cup of warm milk, added while the milk is vigorously stirred. Twenty-five drops of this mixture contain one and one-half minims of creasote. Instead of milk, wine or warm sugar and water may be used; but if alcoholic fluids are used they should be cold, while if non-alcoholic fluids are used—the best of which are mucilaginous—they should be warm.—*Wiener Med. Presse.—Medical and Surgical Reporter.*

Gargle to Prevent Loosening of the Teeth.

\mathcal{R} . Acid tannic, \mathfrak{z} ij; tinct. iodi, gtt. 75; potas iodid, gr. 16; tinct. myrrhæ, gtt. 75; aquæ rosæ, \mathfrak{z} 6 $\frac{1}{2}$. —M. A tablespoonful of this mixture in a third of a glass of warm water to bathe the gums with, after finishing the toilette of the mouth, will, in the end, remedy the loosening of the teeth.—*Union Méd. de Paris.—Med. Reporter.*

Artificial Carlsbad Salts.

THE fulsome advertisements of these salts in various ways may have tended to obscure the fact that very cheap and effective artificial preparations can be

made. One of these is that suggested by Ziemssen: Sulphate of sodium, 40 parts; carbonate of sodium, 6 parts; chloride of sodium, 1 part. This should be dissolved in hot water, then the latter evaporated, the remaining salt powdered, and a proper dose of this (one-half teaspoonful) taken in hot or carbonated water.—*Medical Record*.

Pleurisy.

THE *Medical World* gives the following prescriptions:

℞. Antimonii tartarati, gr. j; vin. ipecacuanha, dr. j; aq. dest., oz. viij. One teaspoonful every hour. In acute pleurisy.

℞. Potass. iodidi, gr. xxxij; syr. ferri iodidi, oz. j; glycerini, oz. j. One teaspoonful twice a day. In children's pleurisy.

℞. Potass. nitratis, dr. ij; liq. ammon. acetatis, oz. ij, dr. ij; sp. ammon. arom. dr. ij; tinct. aconiti, dr. ss; aq. dest. ad., oz. viij. Two tablespoonfuls every five hours.

℞. Ammon. carb., dr. ss; sp. chloroformi, dr. iij; vin. colchici, dr. ss; liq. ammon. citratis, oz. iiss; mucil. acaciæ, oz. iv; aq. dest. ad., oz. viij. Two tablespoonfuls every four hours.

℞. Pil. hydrarg., gr. ij; fol. digitalis, gr. ½; pulv. scillæ, gr. iss. Make one pill, to be taken twice or thrice daily.

Urechites Suberecta.

A CORRESPONDENT of the *Age* sends the following contribution:

We have received an inaugural dissertation by Mr. Minkieviescz, entitled "Contribution to the Knowledge of the Active Constituents in Urechites Suberecta." The investigation was made in the pharmacological institute of the University of Dorpat, under the assistance of the eminent scientists, Professor Dr. Rudolph Kobert and Professor Dr.

Dragendorff. It goes with detail into the chemical composition of the drug, into the toxicology of the same, etc., giving a large number of experiments, and giving the results of 36 experiments with the active principles derived from said drug on different animals. To our readers particularly the resumé of the results will be of interest. The results condensed have been proven to be the following:

1. In the drug urechites suberecta there are two poisonous principles contained, which can be separated one from the other—a glucoside and an acid resin.

2. Both bodies are equally poisonous and give us the same symptoms of poisoning.

3. They are not protoplasmic poisons.

4. They influence the axio-motoric apparatus of the heart and the heart muscle, and kill through heart systole.

5. They cause central and the peripheral irritation of the vagus, with resulting paralysis of the vagus.

6. They increase the blood pressure through stimulating the heart's activity, then reduce it through decrease of the heart's frequency and heart's energy.

7. They exert no influence on the peripheral vessels, possibly on the intestinal vessels.

8. The central nervous system is influenced in the sense of a paralysis.

9. They probably reduce the working capacity of the muscle.

10. They are emetics of a central action.

11. They produce changes in the intestines which cause an increased peristaltic action.

12. They cause an increased secretion of the saliva.

The author states that after the experiments made on animals, he could not make up his mind to experiment

with the active constituents on man, especially as he could not theoretically deduce in which symptoms urechites suberecta could be theoretically supplied. As an emetic, laxative or heart poison, it is inferior to some remedies already known and cannot replace them.

Convinced, therefore, that urechites only deserves, he is sorry to say, a purely toxicological interest, he found it advisable to discontinue the therapeutic part of his investigation.—*Medical Age*.

Rheumatism.

DR. J. POLLOCK, in his post-graduate lecture, delivered at Charing-Cross Hospital, and published in the *Lancet*, makes the following interesting statements on treatment:

The treatment of rheumatic fever a few years ago was most unsatisfactory. I have seen alkalies, quinine, blistering and other reputed remedies tried in a large number of cases, alone or in combination, but without being at all impressed by their value. Some ten or twelve years ago a new and improved method of dealing with the disorder came into operation, the use of salicin as a remedy, which ultimately led to the introduction of salicylate of soda, one of its derivatives.

I cannot say that I have had much success with salicin, though I have tried it in a number of cases, but he must be blind indeed who cannot perceive the great value of the soda salt. There may be some doubt as to whether its use shortens the duration of rheumatic fever, but beyond question it robs the disease of some of its most painful symptoms. In a few days, sometimes hours, the temperature is brought down, the inflammation and pain in the joints subside, and the patient is in most cases practically convalescent.

It is not claimed for salicylate of soda

that it will prevent the occurrence of heart complications, or even hyperpyrexia, but it lessens the chance of either mischief by rapidly reducing the fever. It must also be borne in mind that the drug is not an absolute specific. Where shall we find one? It fails to relieve or cannot be tolerated every now and then. But this is no more than what happens with quinine in ague, or iodide of potassium in syphilis. Salicylate of soda sometimes produces sickness, deafness, tinnitus aurium, and a peculiar kind of cerebral disturbance; but these disagreeable effects quickly disappear on a discontinuance of the drug, and seldom return upon its resumption after a short interval. The salicylate has been charged with producing serious cardiac depression, even causing sudden death; but the evidence on these points is not very clear, and personally I have never witnessed any such effects.

In treating a case of articular rheumatism, the salicylate of soda may be given in doses of ten, twenty, or even thirty grains every two, three, or four hours, according to the severity of the symptoms and the effect produced. Where there is evidence of great acidity, some alkali (five to fifteen grains of the bicarbonate of potash) may usefully be combined with each dose of the salicylate which is best given in some aromatic water to conceal its somewhat acrid taste. It is important to keep up the action of the drug for some days after the disappearance of the fever, as the premature disuse of it is apt to lead to a return of all the symptoms—a so-called relapse.

Towards the close of a case of rheumatic fever, the joints are not unfrequently left rather swollen and painful: it is then that iodide of potassium (internally), and iodine paint (externally) are so useful. When quite convalescent,

the patient should have tonics, and especially steel and quinine; and if rheumatic pains linger, the salicylate of quinine, in five-grain doses, three times a day, is often of much service.

Other salts of salicylic acid will probably be found useful in the treatment of rheumatism; and lately a new preparation, "salol" has been introduced. It is a salicylate of phenol, and has been used a good deal in America, with, I believe, satisfactory results.

But it may be asked, what is to be done in those cases of articular rheumatism in which the salicylates are not successful? Well, it is unfortunate when this happens, but we may fall back upon large doses of salicin, upon alkalies, or upon the excellent alkaline quinine prescription of Sir Alfred Garrod. Quinine and bicarbonate of potash are rubbed up together with a little mucilage and some aromatic tincture, in such proportions that each ounce and a half of the mixture contains five grains of quinine (in the form of carbonate) and thirty grains of potash. This dose may be given every four hours for as long as may seem desirable.

Of course, all cases of rheumatic fever must be kept in bed, and properly dieted. The most suitable nourishment in the earlier stages is the usual beef-tea and milk "fever" diet, but to this may soon be added some farinaceous food, eggs, and afterwards fish. Rheumatic fever is a disease of debility, and it is very desirable to keep up the strength of the patient; but in some cases the too early resumption of meat has seemed to be followed by a return of the rheumatism. Further information on this point would be of value. Stimulants are not absolutely necessary, nor often needed, in cases of articular rheumatism; but they may be required at times, and should be administered in accordance

with the condition of the patient. The bowels should receive attention but no active purging is required, especially as movements necessitated by any action of the bowels are attended with considerable pain in severe cases.

On the other hand, opium or morphia which may well be used hypodermically, is often of great service, alleviating the pain in the joints and allowing the patient to get some sleep. When cardiac mischief arises in a case of acute rheumatism, it should be treated in accordance with the plan adopted in such cases, the consideration of which is outside my subject.

I must, however, say something about the treatment of hyperpyrexia, a matter of much interest and importance. It is unfortunate that in this severe condition, where most we want its aid, the salicylate of soda, though it was originally introduced as an antipyretic, should entirely fail.

Nor can I say much that is favorable of any other of the reputed febrifuges, such as quinine, antipyrin, etc. In truth, we are driven, in the treatment of hyperpyrexia, to the application of external cold, and although some years ago I expressed a very doubtful opinion as to the efficacy of this method, a further knowledge of the subject has led to a considerable modification of my original views. There is now, I think, no question that the careful and judicious use of the cold bath or cold pack holds out the best chance of saving life in these truly formidable cases. The most important precaution would seem to be that the application of cold should be gradually and cautiously applied so as to avoid shock. This may be accomplished by placing the patient at first in a bath the temperature of which is not much below 80° F., and gradually reducing the temperature until the desired

effect is produced. This bath may have to be repeated more than once perhaps, and the use at the same time of injections of ice-cold water into the rectum may be of service.

Where a bath is not available, or thought to be undesirable for any reason, the cold pack may be tried. In cases where ice is not used, the patient's body and limbs are wrapped closely in a single sheet, which has been previously wrung out of cold water (temperature 50° to 60°). A blanket is then thrown loosely around him, and he is allowed to remain undisturbed for about half an hour, when the same process is gone through again, and repeated until the temperature is sufficiently reduced. When the ice pack is employed, a hip bath, or other suitable receptacle, containing a few gallons of water, in which some large pieces of ice are floating, is kept by the patient's bedside, and his body and each limb are separately wrapped in pieces of old sheeting which have been wrung out of the iced water, each piece being renewed as often as it begins to feel warm to the hand. No other covering of any kind is put over the patient.

In this way the temperature may be very rapidly reduced, and it is necessary to be careful that it is not brought too low. It should not fall below 99° F.

Strychnine as an Antidote in Narcotic Poisoning.

It is universally recognized that narcotic drugs in lethal doses produce death through paralysis of the respiratory centre, and it appears difficult to account for the fact that strychnine, the most powerful stimulant to that centre which we possess, should not be recommended as part of the routine treatment for all narcotic poisons. Atropine for the present is allowed to hold this position, but there is a stage in opium

poisoning at which the use of this drug is fraught with danger, and a patient may pass away in a condition of profound narcosis in which the action of atropine preponderates over that of the original poison.

Strychnine has long been used as an antagonist to chloral in cases of poisoning by that drug, and the similarity in many respects between the effects of chloral and of opium led Dr. G. A. Gibson to employ strychnine in order to counteract profound opium narcosis.

In a number of cases of narcotic poisoning which came under Dr. Gibson's care, strychnine was used hypodermically when there had been any irregularity or interruption of the breathing, and the effect of this drug was immediately shown by the increased rate, more regular rhythm, and greater depth of the respirations; while even in cases where the breathing had ceased, Dr. Gibson states, it has again commenced after the administration of the strychnine.

Dr. Gibson takes exception to the general treatment of narcotic poisoning given in the ordinary books, and contributes the following as the best method of treatment in such cases.

The chief indications in all such cases are two in number: first, to remove any of the poison that may be within reach; and, second, to sustain the activity of the vital centres, especially that concerned in the maintenance of the respiration, until the poison which has been absorbed is eliminated.

The first indication can most perfectly be met by washing out the stomach by means of the siphon tube, which is at once more convenient and more thorough than the stomach pump. If neither siphon nor stomach pump should happen to be at hand, a tablespoonful of mustard in half a pint of

tepid water, or 20 grains of zinc sulphate in a similar quantity of water, may be administered. In suicidal cases, however, the exhibition of such remedies is as a rule well nigh impossible, and for these, as well as many other cases, the hypodermic injection of $\frac{1}{10}$ of a grain of hydrochlorate of apomorphine, which may always be kept ready in the form of tabloids, is necessary. By one or other of these methods the last trace of the drug may be removed from the stomach. If the siphon or stomach pump has been employed, a pint of strong black coffee should be introduced before it is withdrawn, or, if neither can be used, it may be given by the rectum.

The next indication is to keep the vital centres in a state of activity, while at the same time doing nothing that can in any way cause exhaustion of any part of the system. Here we have at our command several means of rousing the centres, which may be used in turn according to circumstances. It is well as a rule to keep the patient awake by asking questions or issuing commands in a loud voice. If this is not enough, the same end may be attained by tapping the forehead with the tips of the fingers, pinching the arms and legs, or pricking the skin slightly with a needle. If these are not sufficient to prevent the appearance of sleep, the cold douche may be used; but in Dr. Gibson's opinion the employment of cold is as far as possible to be avoided. A far more efficient mode of rousing the patient is to be found in the application of mustard leaves to the calves, and in the use of the interrupted or induced current, as by such means powerful stimuli may be administered without the possibility of aiding the depressing effects of the poison.

One method of keeping the patient

awake must emphatically be condemned—namely, that of making him walk about, as is still to be found recommended in some of the text books. This method used to be in vogue at some of the hospitals, and was carried out by means of relays of policemen specially told off for the duty. The patient was marched round the waiting room between two of them, and was followed by the resident physician or clerk in charge of the case, whose rôle was to flick the calves with a wet towel, if there be any signs of flagging energy on the part of the patient. This mode of preventing the patient from sinking into slumber has a great tendency to exhaust the vital powers, and has almost every-where been rightly abandoned.

Another method commonly adopted in such cases must also be at least strongly denounced—namely, the administration of alcoholic stimulants. These aid the action of narcotics, and must be studiously avoided.

Keeping the patient in the horizontal position, the respiration is to be carefully watched, and if there should be the least sign of irregularity, or shallowness, or inequality in the breathing, $\frac{1}{100}$ or $\frac{1}{50}$ of a grain, according to the age of the patient, of sulphate of strychnine should be administered subcutaneously, and may be repeated at intervals of an hour two or three times. If, in spite of the strychnine, the respiration becomes very feeble or ceases entirely, artificial respiration must be commenced promptly. The most convenient method to employ is that of Sylvester; and it should be persisted in until, on the one hand, the respiration is carried on by natural means, or, on the other, the heart has for half an hour ceased to beat. If any one who reads these remarks should employ strychnine in the manner above described, he will

be struck by the immediate improvement in the respiration which follows its administration.

If the circulation threatens to fail in consequence of the poison affecting the motor mechanism, or of spasm of the arterioles caused by deficient oxygenation of the blood, it also will require prompt attention. The use of the strychnine is of service as a stimulant to the motor centres of the heart, and may be aided by the employment of ammonia or ether; while if artificial respiration has been thoroughly performed there should be no spasm of the arterioles; but in the event of such an occurrence recourse must be had to nitrite of amyl.

Although special reference has been made in these remarks to narcotic poisoning, it must be added, in conclusion, that in cases of danger from failure of the respiratory centre, caused by the general anæsthetics, the employment of strychnine is likewise of the greatest importance.—*Therapeutic Gazette*.

DISEASES OF THE NERVOUS SYSTEM.

Secondary Dementia—Viewed from the Clinical, Hereditary and Evolutionary Points.

DR. CLOUSTON (*British Medical Journal*) concludes an able discussion thus :

1. Normal brain cortex differs enormously in different individuals in its inherent qualities and potentialities, these differences being in the most important points necessarily "functional."

2. The strongest common clinical and psychological tendency of every form of mental disease is the tendency to end in dementia.

3. Dementia being a virtual death of the higher mental powers, all insanities, therefore, mean mind death and social death.

4. Dements constitute two-thirds of our insane population.

5. Forty out of every hundred of all cases of insanity soon pass into secondary dementia pure and simple, or mixed up with maniacal or delusional conditions.

6. The functional change that takes place in the brain cortex in secondary dementia is primarily and chiefly confined to the mind tissues, and is, in fact, a unique disease in nature with no pathological analogies whatever.

7. The problem of what secondary dementia means and how it can be averted is the cardinal problem of psychiatry.

8. Mental disease may be defined as a "tendency to dementia."

9. The constant association with dements alone tends to lower the mental tone of the staffs of asylums by the well known law of the action of mind on mind.

10. Secondary dementia has as yet no sufficient pathological explanation.

11. It may be looked on as a reversion of type, as a failure of nature's power to complete her most organized and highest product, as a premature functional death of the mind tissue, or as a most beneficial result of the laws that bring a bad stock to an end.

12. Real secondary dementia may be so closely imitated by secondary stupor that only time and the effects of treatment can distinguish them. We may look on the primary maniacal attack as threatened dementia, and the secondary stupor as bring a further stage towards it.

13. We have no reason to think that a brain which has a perfectly sound heredity can by any series of bad conditions known to us be made to exhibit typical secondary dementia.

14. The impressions through the senses from the outer world do not

stimulate normally the cortex of a dement, though if the stimulant is very strong a certain response is obtained, but such a brain is incapable of providing such a stimulus by its own inherent working.

15. Dementia cannot be looked on as caused by the damage done to the mind tissue through the primary acute disturbance, for it often occurs without an acute primary stage, and its occurrence bears no definite relationship to the intensity or the duration of the primary attacks.

16. Most of the cases of chronic and delusional mania have also dementia superadded.

17. The pathological appearances, naked eye and microscopic, found in the brain cortex in long continued cases of dementia, are capable of explanation on the theory of the degeneration and atrophy of long disused tissue; or they may be the advanced stage of the pathological condition, which is the real dementia, but which in its early stage we cannot as yet recognize.

18. No merely vascular theory of dementia is tenable.

19. Typical secondary dementia is always hereditary, and its genesis can be traced through the stages of hyperactivity, hyperæsthesia, diminished inhibition, instability, melancholia, mania, and alternation in different generations, or in members of the same generation affected in different degrees.

20. Pure and uncomplicated secondary dementia does not readily supervene on the insanities that occur after full development of and before the period of decadence, such as puerperal and lactational insanities, or those resulting from overwork or emotional causes at that age.

21. Melancholic and alternating insanities, delusional and inhibitory

insanities, are not the preliminary stages of secondary dementia nearly so frequently as maniacal attacks.

22. Almost all pure cases of secondary dementia will be found to have originated in the developmental (pubescent and adolescent) insanities.

23. Masturbation may be an element in the production of secondary dementia in some cases, but is not a necessary or a constant cause.

24. Idiocy and congenital imbecility represent Nature's failures during brain growth, while secondary dementia is the typical failure during brain development.

25. Pure secondary dementia means that the organism has failed in its most highly organized structure and its most important function just at the point before full reproductive perfection should have naturally been reached.

26. Undue and unphysiological means through a forcing-house mode of education during adolescence, without regard to the hereditary capacity and weakness of the organism tend towards dementia.

27. The constant changes in each generation of modern civilized life, in the adaptation of the human organism to its environments, and the special efforts thus rendered necessary by the struggle for existence, tend towards dementia, through the strain they put on the most delicate of all organized tissues.

28. Adolescent insanity ending in secondary dementia may be regarded as the typical form of mental disease.

29. Dementia would have seemed a more natural sequence of the insanities of decadence (climacteric and senile) than of any others, for in them it would be a mere anticipation of the reproductive and mental death that has physiologically begun.

30. The lower animals, while subject

to attacks analogous to melancholia and mania, are not subject to any state corresponding to secondary dementia before the senile period.

31. By prophylaxis in some cases, and by right treatment of the primary attack in others, dementia may be averted, but in many cases it is inevitable through the bad heredity of the individual.—*American Lancet*.

Butyl-Chloral in Trigeminal Neuralgia.

THERE are only a few remedies which exercise their action upon one nerve alone. According to Liebreich (*Therapeutische Monatshefte*), butyl-chloral is one of these; in doses of from 15 to 45 grains it produces anæsthesia of the trigeminal nerve. Liebreich has convinced himself of this in tic douloureux. Unfortunately it is not lasting in its effect, and large doses produce sleep. It is very serviceable, however, in neuralgia of the trigeminus in which the pain is not chronic. Rheumatic face ache, pains occasioned by injury, toothache, either from an inflammation of the pulp or from periostitis, may be obviated by the use of butyl-chloral. He has used butyl-chloral with much satisfaction also in cases in which at the beginning the filling of a tooth has exerted painful pressure.

The drug is disagreeable in taste and difficultly soluble. The following prescription for its use is suggested:

Butyl-chloral, gr. xxx-lxxv; spiritus vini rectificat, ℥cl; glycerini, f 3 v; aquæ destil, f 3 iii 3 vi. M. Sig. Take three or four tablespoonfuls at once.

The size of the doses is to be regulated by the intensity of the pain and by the condition of each individual patient.—*Medical and Surgical Reporter*.

Hemiplegia.

DR. J. H. JACKSON in a recent lecture upon diseases of the brain, adds some

original and thoughtful facts to our knowledge of this subject. He speaks of two types of hemiplegia, an arm-type and a leg-type, where either of these extremities is most disabled. In a left hemiplegia the arm-type would be preferable, because the left arm can, if necessary, be dispensed with; while in a right hemiplegia the leg-type would be preferable, since a man can better afford to lose a right leg than a right arm, and there is less likelihood of defect of speech if the leg-centre is chiefly affected.

If the paralysis begins very locally, say in the hand, and increases in degree and range very slowly, day by day and week by week, there is great probability of tumor of the opposite cerebral hemisphere. In most cases of slow hemiplegia one should treat for syphilis in the early stages. A hemiplegia following immediately upon an epileptic seizure beginning very locally, would indicate cortical disease in the rolandic region. The discharging lesion causing epileptic seizures in such cases is usually probably a local encephalitis about a tumor.

The treatment of syphilitic post-epileptic hemiplegia is treatment for syphilis, of course, and also empirical treatment with bromides, the hemi or mono-plegia itself requiring no treatment.

If hemiplegia comes on deliberately, say in half an hour, without defect of consciousness, the presumption is for local softening from plugging of the middle cerebral artery or one of its branches. If rapid with loss of consciousness, or if coma soon follows a deliberate onset, the presumption is for cerebral hemorrhage. But these rules are only empirical and have their exceptions.

The type of syphilitic hemiplegia due to a syphilitic endarteritis is not cured by drugs. After the artery is obliterated

and softening occurs, drugs will do nothing toward curing the paralysis. But active treatment should nevertheless be carried on with mercurials and iodides in order to prevent similar occlusion of other vessels. There is no doubt that some of these cases of hemiplegia do recover, but not from treatment. All cases of hemiplegia, from whatever cause, that get well do so through the law of compensation by other nervous elements. This compensation will depend materially upon the smallness and position of the lesion.

As regards treatment in all classes of hemiplegia, the paralysis needs none. Massage and gentle faradization will be of some service while we are waiting for compensation, but merely as an artificial exercise. To diminish the quantity of highly nitrogenized food, to look after digestion, to keep the patient's bowels free, is the best style of treatment. If arterial tension be high give small doses of mercury and saline aperients. Never give strychnine in cerebral paralysis.

Hemiplegia is not a nervous disease at all in the strict sense; it is in most cases an arterial affair.—*British Med. Journal*.—*Analectic*.

DIGESTIVE TRACT.

Gastric Cough and its Treatment.

BULL (*Deutsche Archiv für Klin. Med.*) asks if, as is now supposed, cough may have its origin in such diverse parts as the nose, larynx, bronchi, pleura, œsophagus, intestine, liver, spleen, the uterus and its appendages, why may not the stomach also occasionally be the seat of the afferent impulse. In reviewing the literature, he finds all authors agree as to the possibility of the gastric origin of cough, but regard it of great rarity. Bull recently encountered such a case in a young,

anæmic woman, affected with a violent, dry cough excited by pressure over the epigastrium. There were no signs of pulmonary disease. Hæmatemesis and other indications of gastric ulcer had preceded the appearance of the cough. He considers it not unlikely that the cicatrices of the ulcer were the source of the reflex irritation. Chloral and morphine were used unsuccessfully in the treatment of the cough. Subsequently treatment directed to the stomach cured it. Cataplasms were applied, and internally gr. xlv of bismuth were administered four times daily in 3 xxv of luke warm water. The cough lessened after the first dose and then gradually disappeared. A recurrence cured by the same means.—*Polyclinic*.

Oatmeal.

BARTHOLOW says: Oatmeal is very indigestible, and frequently gives rise to gastro-intestinal catarrh and constipation.—*Coll. and Clin. Record*.

Indigestion and Flatulence.

R. Pulv. carbo., lig., 3 i; pepsin pulv., grs. xxxvi; pulv. capsici, grs. iv; pulv. ipecac., grs. iii. M. ft. pulv. no. xii. Sig. One to be taken after eating in a flour wafer.

The Milk-Curdling Ferment of the Stomach.

DR. E. G. JOHNSON has studied the action of the milk-curdling ferment of the stomach in the clinic of Professor Riegel, of Giessen, and subsequently in the Sabbatsberg Hospital, Stockholm.

Researches were made in twenty-four cases on the presence of the ferment and the pathological conditions relative to it. Fourteen of these patients suffered from hyperacidity, accompanied in four of them by moderate dilatation of the stomach. In one

of these latter there was also hypersecretion of the gastric juice. One case had considerable dilatation of the stomach, with hyperacidity and marked hypersecretion. In three cases the dilatation was insignificant, but there was hyperacidity, complicated in one case by slight, and in another by very great, hypersecretion; in the third case the hyperacidity was accompanied by chlorosis. Three other patients suffering from hyperacidity were also the subjects of gastric ulcer. Dr. Johnson also examined four cases of hyperacidity with neither dilatation nor hypersecretion, of whom three were chlorotic; a case of catarrhal jaundice, four cases of severe chronic dyspepsia, and five cases of carcinoma of the stomach. The contents of the stomach were removed while the patient was fasting, and also four or five hours after food had been given for the purpose of the observations. Dr. Johnson sums up his researches as follows:

1. The milk-curdling ferment is a constant product of the glandular secretion of the stomach, and it is met with at all periods of digestion, except in cases of cancer of the stomach, in which it is never found.

2. The ferment was also found in the hypersecretions of the gastric juice of a fasting patient after his stomach had been washed out the previous evening.

3. Gastric juice, which contains hydrochloric acid, and which when neutralized causes coagulation of milk, does not appear to be affected in its action by the greater or less amount of acid contained in it at first.

4. The milk-curdling ferment does not pass into the urine.

5. The ferment is easily destroyed by an excess of alkali, and it is probably on this account that it does not pass into the fæces under normal conditions.

6. During fever the ferment appears to be absent from the stomach.

7. The ferment causes coagulation more slowly in boiled than in fresh milk.

8. During the coagulation of milk by the ferment the reaction remains neutral, and lactic acid is not met with after coagulation.—*Lancet*.—*Therapeutic Gazette*.

The Chemical Testing of the Gastric Juice.

MUCH has been said of the impropriety of the promiscuous administration of pepsin in digestive disturbances without knowledge of the condition of the gastric juice, and it is therefore of much interest to learn that it is now possible to chemically test the gastric juice. This will naturally facilitate the exact and scientific administration of its digestive ferment, pepsin.

Le Progrès Médical, in a recent article, shows that great advances are being made in applying to medicine the knowledge furnished by organic chemistry.

It seems that during a few years past a number of reactions of the stomach acids with certain organic materials have been discovered. These reactions are found to be of great service for diagnostic purposes. By means of comparatively simple methods an accurate qualitative analysis of the gastric juice may be made.

For the detection of hydrochloric acid are used the two reagents, tropeoline and phloroglucine-vanilline. A solution of tropeoline is normally yellow, but is altered by hydrochloric acid to a brown color.

Phloroglucine-vanilline consists of a mixture of two parts of phloroglucine and one of vanilline dissolved in thirty parts of absolute alcohol. Thus prepared, the reagent has a reddish

yellow tint. Addition of hydrochloric acid, or of any mineral acid, changes the solution to a brilliant red.

An easy method of estimating hydrochloric acid quantitatively, and which is accurate for diagnosis, is found in the use of an aniline derivative, *vert brillant*. Its aqueous solution is bluish green. In the presence of a one-tenth per cent. solution of hydrochloric acid it becomes green; with a fifteen-hundredths to a two-tenths per cent. solution, yellow; with a four-tenths per cent. solution, or stronger, it assumes a "dead leaf" color.

For finding lactic acid are used methyl violet, ferric sulphocyanide, and the so called reagent of Uffelmann. An aqueous solution of methyl violet changes from a pale to a rich blue in the presence of lactic acid.

Ferric sulphocyanide is decolorized by lactic acid.

The reagent of Uffelmann is prepared by adding a few drops of ferric chloride to a solution of carbolic acid. The resulting fluid, which is violet, becomes yellow with lactic acid, and is decolorized by hydrochloric acid.

To detect peptones the liquid under examination is made alkaline with potassium or sodium hydrate; a salt of copper is then added, and according to the amount of peptone present, a lilac, violet or rose color is obtained.

Pepsin is demonstrated by artificial digestion.

Propeptone also yields a precipitate on the addition of acetic acid and ferrocyanide of potassium.

In employing the reagents above mentioned, first of all, a sample of the patient's gastric juice must be obtained. Some withdraw it undiluted, others give water a short time previously, and others still prefer to have some simple kind of food taken, allowing the

stomach to act on it a while before removing the contents.

It is found that lactic acid disappears from the stomach after digestion has proceeded from a quarter to a half an hour. Hence the diagnosis is founded chiefly upon the presence and amount of hydrochloric acid, and this feature is even made a basis for classification.

Digestive disturbances of the stomach are: those characterized by a deficiency, by a normal amount, or by an excess of hydrochloric acid.

Hydrochloric acid is found to be deficient in cancer of the stomach, and in dyspepsia depending on catarrhal and atrophic conditions.

The amount of hydrochloric acid is normal in nervous dyspepsias, or where some intestinal trouble simulates gastric disease.

Excessive secretion of hydrochloric acid constitutes a form of dyspepsia only recognized recently. It is usually associated with atony of the stomach.

It is easy to see how great may be the value of the reagents named in making a correct diagnosis between these various difficulties and in deciding upon a rational method of treatment.—*Druggists' Bulletin*.

DISEASES OF RESPIRATORY ORGANS.

Acoustics Applied to the Human Chest in Physical Diagnosis.

DR. J. R. LEAMING read a paper before the New York Academy of Medicine, entitled: Acoustics Applied to the Human Chest in Physical Diagnosis, in which he said that it was not until the laws of light were studied in relation to the eye that ophthalmology became a true science. There is a law of acoustics which, when applied to the air chamber of the chest, will place the

diagnosis of diseases of the organs within on a scientific basis. This practical age of the application of the laws of sound to the telegraph, phonograph, etc., makes it easy to apply acoustic law to the chest in diagnosis. Dr. Leaming considered the different facts involved in this subject, beginning with a brief statement of the laws governing sound, the most important of which, in this connection, are that sound consists of vibrations of the air; a greater number than seventeen hundred vibrations a second is not appreciated by the human ear; and fewer than thirty-two a second give the impression of distinct sounds. He described the chest as a chamber whose walls are lined with a dense elastic smooth membrane, and closed at the base by the diaphragm. It is a perfect acoustic chamber which can be enlarged or contracted, and its power increased or diminished with the speed of thought. While a most perfect instrument for the formation and reflection of sound waves, it is liable to alteration by disease and its acoustic qualities to change. It also contains the lungs, tubes, and heart, which interfere with its acoustic qualities. The heart and lungs accomplish their work with sound, and to these the auscultator must attribute due importance. The arrangement of the tubes and sacs in the lungs also constitutes an acoustic instrument, but of a different kind from that of the chest chamber. Each sac is a resonator distended with air constantly rarefied by heat, and upon this air the sac constantly contracts, causing vibrations which help to make up the vibrations of the respiratory murmur. Sound waves also pass in from the open air and are consonated in each sac, as are also the friction vibrations of the tidal air rushing in and out through the open bronchi.

Speaking of acoustic laws as applied to the heart, the author said he had become further convinced of the correctness of the view expressed by him twenty years ago regarding the origin of the first sound of the heart. It is formed by the vibrations of the tense mitral valve, by the tense chordæ, the sound of muscular contraction, and the friction of the blood.

Regarding stethoscopes, he said there is none better than Camman's binaural instrument; but for accuracy and delicacy, and least likelihood of getting out of order, nothing equals the application of the temporal bone of the head to the resonant body; the most sensitive point of this bone is in front of, and just above, the external ear.

The paper was discussed by Dr. A. L. Loomis, who thought it could not be more finished as it related to the principles of acoustics in diagnosis of diseases of the chest; but it had brought the subject down to the practical application of those principles and left it there to be carried farther by each hearer. Dr. Loomis regards four qualities of sound as of every day use to the diagnostician—pitch, quality, duration, and rhythm. He fully agrees with Dr. Leaming regarding the importance of cardiac rhythm, slight alterations of which being often of greater significance than murmurs without change in rhythm. He has never been able to separate what Dr. Leaming had referred to as the consonant resonance of the sacs from the other elements of the respiratory murmur.—*Med. and Surg. Reporter*.

Cough Mixtures.

℞. Acid, hydrocyanic. dil., ℥ iij ; spts. chloroformi, ℥ x ; acid. hydrobromic (34 per cent.), ℥ xv ; syr. scillæ, ℥ xx ; syr. tolutani, fl. dr. ss ; aquæ, q. s. ad. fl. dr. ij. M. Sig. One dose for

adult; to be repeated every three or four hours.

℞. Syr. tolutani, syr. pruni virginianæ, tinct. hoyseyami, spir. ætheris com., aq, āā part. æqual. Mix. Dose. A teaspoonful.—DR. E. G. JANEWAY.

℞. Ammonii chloridi, dr. 1; spir. ætheris comp., fl. dr. 6; syr. pruni virginianæ, fl. oz. 2; aquæ, q. s. ad. fl. oz. 4. Dissolve and mix. Dose. A teaspoonful.

℞. Acidi hydrocyanici diluti, chloroformi purificati, āā ʒ 30; tinct. hyoscyami, fl. oz. 1; aquæ camphoræ, q. s. ad. fl. oz. 2. Mix. Dose.—A teaspoonful.

Bronchitis.

℞. TINCTURE veratri viridis, ʒ xv; syrupi ipecacuanhæ, spiritu ætheris nitrosi, āā fl. oz. ss. M. Sig.—Fifteen drops every three hours. For a child one to two years old.—B. F. SCHNECK.

Another :

℞. Pulveris ipecacuanhæ, gr. vj; pulvires myrrhæ, gr. xij; potassii nitratis. dr. ss. Misce et divide in partes vj. Sig.—One every fourth hour. For elderly persons.—PARIS.

Another :

℞. Acidi hydrocyanici diluti, gtt. j; tincturæ lobeliæ, fl. dr. j. M. Sig.—One dose. Complicated with asthmatic symptoms.—LIVEZY.

Gargle for Subacute Pharyngitis.

℞. FERRI et ammonii sulph. (U.S.P.), potassii chloratis, āā dr. 1; aquæ, fl. oz. 16. Dissolve. Use as a gargle, morning and evening.—DR. W. F. MITTENDORFF.

On the Treatment of Hiccough.

IN the *Allgemeine Medizinisch Central-Zeitung*, Dr. Pensky asserts (on the ground of his experience of about 20 years' duration) that hiccough can be infallibly and momentarily arrested by the following procedure: The patient should stand erect with his arms abducted from the body up to a horizontal

level. The doctor (or any body) places himself face to face with the patient and compresses his radial arteries, while a third person makes the patient swallow slowly, but steadily (without any interruption) a tumblerful of water. Referring to Dr. Pensky's method, Mr. G. Gûstchin draws attention to the fact that hiccough, however severe or obstinate, can be swiftly stopped by a much less troublesome and fussy procedure, and one practised by the Russian peasantry from time immemorial. It consists in making rapid and deep inspirations, alternating with very slow and deep expirations. The author employs this simple means with uniform success in all cases he meets.—*St. Louis Medical and Surgical Journal*.

Vocal Music and Prevention of Phthisis.

AT a meeting of the Medical Society of Virginia, Dr. C. E. BUSEY, of Lynchburg, Va., read a paper on the cultivation of vocal music in schools as one of the means of preventing phthisis. He states it as a well known fact that those nations which are given to the cultivation of vocal music are strong vigorous races, with broad expansive chests. If an hour a day in public schools were devoted to the development of vocal music, there would not be the sad spectacle of the drooping, withered, hollow chested, round shouldered children which confronts us now. There is too great a tendency to sacrifice physical health upon the altar of learning. Vocal music is gymnastic exercise of the lungs, producing increased expansion of the lung tissue itself. The lungs in improved breeds of cattle, which naturally take little exercise and are domiciled much of the time, are considerably reduced in size, when compared with those animals running at liberty; and so it is with the

human beings who lead inactive lives. Phthisis generally begins at the apices of the lungs because these parts are more inactive, and because the bronchial tubes are so arranged that they carry the inspired air with greater facility to the bases than to the apices. During inactivity a person will ordinarily breathe about 480 cubic inches of air per minute. If he will walk at the rate of six (*sic*) miles an hour, he will breathe 3,260 cubic inches. In singing, this increases more than in walking, as singing well requires all of the capacity of the lungs. The instructor of vocal music, in addition to his musical education, should understand the anatomy and physiology of the respiratory organs.—*Virginia Medical Monthly*.

Myrtol as a Disinfectant of the Air-Passages.

THE problem how to disinfect the air-passages is not yet solved. Skoda's turpentine inhalations are not always tolerated, and require a long use. Masks and similar apparatus (Curschmann and others) are also much objected to by patients. Professor Eichhorst is of opinion that myrtol will leave all other disinfectants in the background in security and quickness of action. Myrtol is represented by that part of myrtol oil which comes over between 160° and 170°. It is a clear fluid of aromatic and penetrating smell, which can be conveniently administered in gelatin capsules. French authors have recommended it in bronchial catarrh, and scattered observations have been made on its disinfecting properties. But a methodical use of this substance has not been made, and it is not mentioned in various recent works on therapeutics. After only one gelatine capsule, the breath smells of myrtol within an hour, and the effect lasts from twenty-four to forty-eight hours; but, in order to sub-

due putrid processes, two capsules (each containing .15 gramme) were usually given every two hours. The appetite improves under its use, and the expectoration and breath lose all offensive odor with remarkable quickness. Four cases are mentioned by Professor Eichhorst as showing the beneficial action of myrtol in a striking degree, but one of the cases showed that it possesses no specific action against the tubercle-bacillus. The expectoration diminishes under its use; the appetite as before remarked, improves, and the patients feel better generally.—*London Medical Recorder*.—*Therapeutic Gazette*.

External Application of Chloral Hydrate in Night-sweats.

DR. NICOLAI (*Gazette Médicale*) has obtained very favorable results from the use of chloral hydrate in the night sweats of phthisis. Every night before retiring the entire body of the patient was sponged with the following: \mathcal{R} . Chloral hydrate 3 ij; alcohol, water, āā \mathfrak{z} iij.—M.

Should this not suffice, the patient's night dress is saturated with this solution, then allowed to dry, and worn.

This mode of treatment also gave excellent results in the night sweats of children the result of phthisis. Two or three of these sponges will generally suffice to check the sweating which has persisted for two or three weeks.—*Bull. Therapeutique*.—*Medical News*.

Winter Cough.

This may be promptly cured by prescribing the following :

\mathcal{R} . Terebene pur. 3 drams; ol. eucalypt. globul, 2 drams; syr. tolu, 2 ounces; listerine, 2 ounces. M. Sig. A tablespoonful every two or three hours. Shake the bottle well before using.—*Medical World*.

THE AMERICAN MEDICAL DIGEST.

PART II.

SURGERY.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

Report of a Case of Supra-Acromial Dislocation of the Clavicle.

DR. CHARLES A. POWERS (*N. Y. Medical Journal*):

Upward dislocation of the outer end of the collar-bone is of such frequent occurrence that no reference need be made to its causes or its evidences. Its treatment is, however, of exceptional interest. Complete retention of a proper position after thorough reduction is a matter of no little difficulty, and I think that surgeons agree that in very many cases a certain amount of deformity persists even though the functions are completely restored. In the male this loss of contour is of little moment, but to the young women whose shoulders adorn society it is a matter of no inconsiderable importance.

Reference to the cuts will show that the patient, whose history is briefly appended, presented an unusually marked degree of deformity. His cure was no less exceptionally perfect.

T. F. K., an elevator boy, twenty-three years of age, fell forcibly to the floor, striking heavily on the postero-external aspect of the right shoulder. Half an hour thereafter he sought treatment at the Chambers street Hospital.

Examination revealed a complete supra-acromial dislocation of the right clavicle. The shoulder fell downward, slightly inward, and forward, and was

the seat of almost complete disability. The outer end of the clavicle rode on the superior surface of the acromion, and its articular surface could plainly be felt. The long axis direction of the collar-bone differed but slightly from that exhibited by its fellow. The deformity is very well shown in Figs. 1 and 2.

The upper third of the arm being firmly grasped, the humerus could be

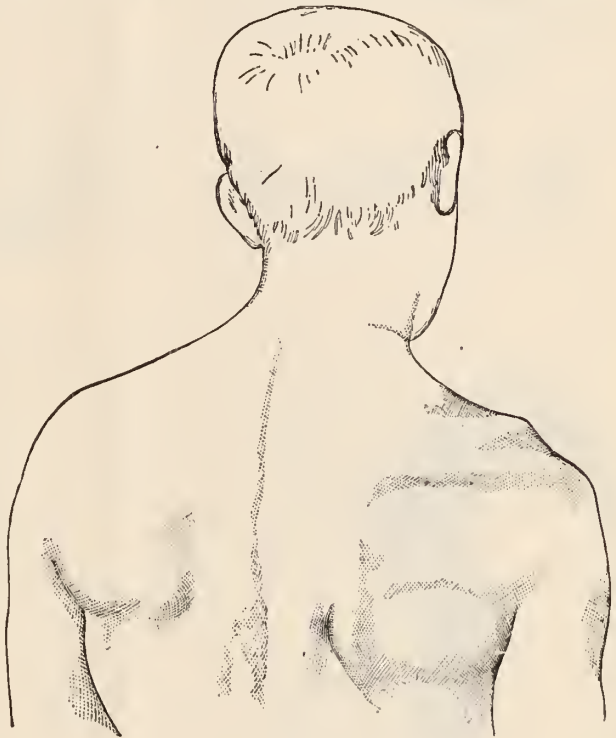


Fig. 1.

used as a lever with which to pry the shoulder up and out. The deformity being very thoroughly reduced, Dr. Harris, the house surgeon, applied a plaster dressing as advised by Dr. L. A. Stimson.

A small, firm pad was placed over the outer end of the clavicle.

A strip of rubber plaster, three inches in width, was applied beneath the flexed elbow and carried up the back of the

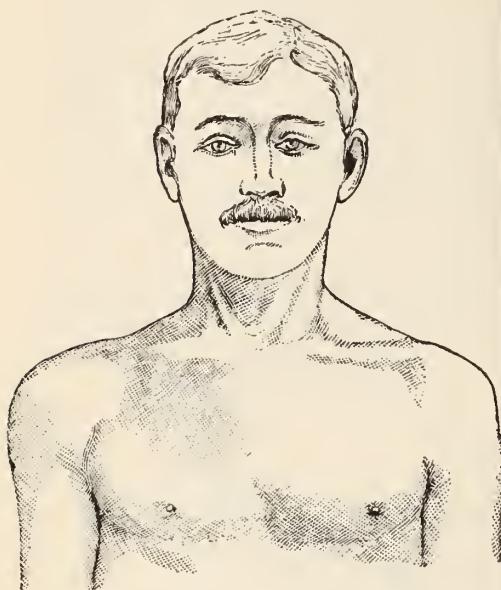


Fig. 2.

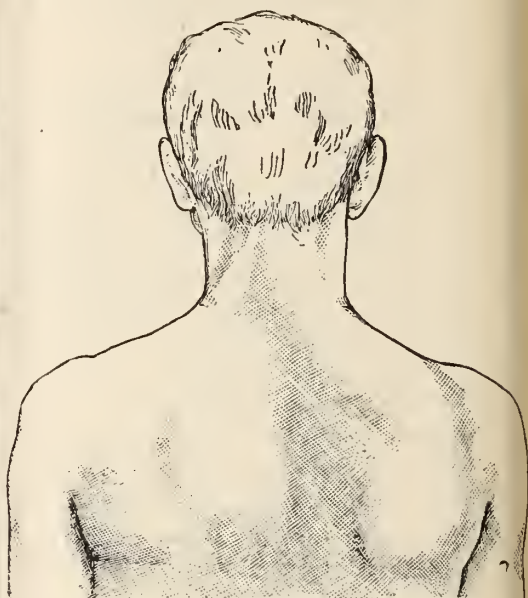


Fig. 4.

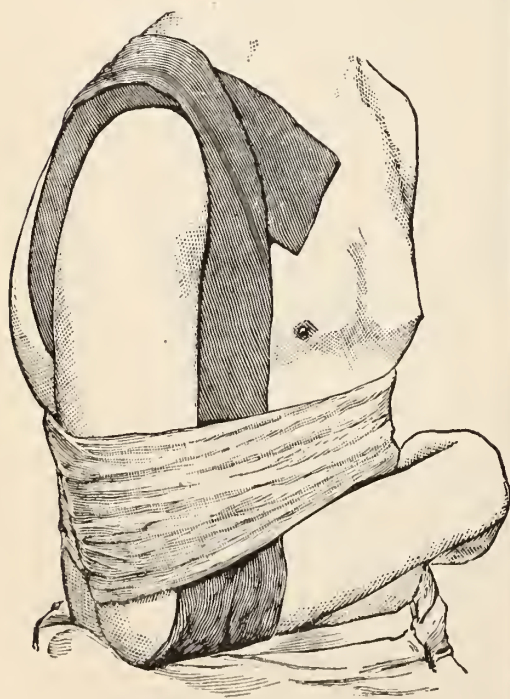


Fig. 3.

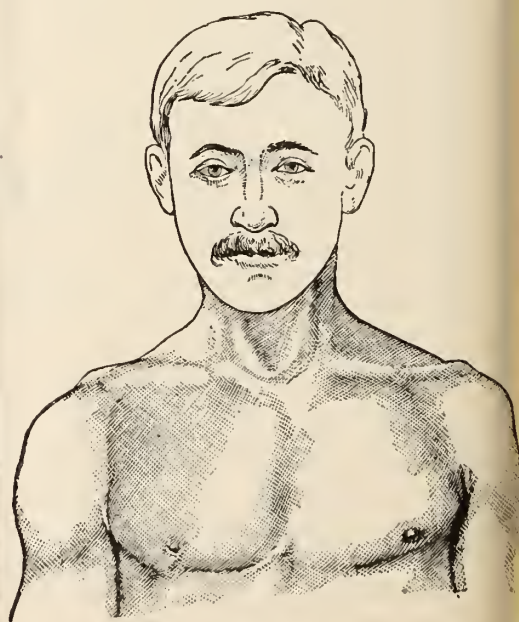


Fig. 5.

arm over the outer end of the clavicle to the front of the chest, up the front of the arm, and over the clavicle to the back of the chest. (A glance at Fig. 3 will show that the plaster, when firmly applied in the manner described, holds the shoulder up and the collar-bone down.) The elbow was adducted to the chest and a roller bandage carried about the body. The dressing was left in place ten days, removed, the position of the parts noted as perfect, and the dressing re-applied and left on until the twenty-seventh day. That the contour of the parts was restored perfectly is shown in Figs. 4 and 5. Ten days after removal of the dressing the functions were in every way complete, and the only difference between the joint and its fellow was a moderate degree of thickening on the affected side.

Treatment of Empyema.

LINK describes two cases operated on by drilling into the maxillary sinus through the outer wall of the inferior nasal meatus. In each case pre-existing fistulæ, one into the mouth and the other on the cheek, were thus closed, the antrum being washed out through the nose, a decided advantage. It is claimed that percussion of the hard palate will show whether the antrum is empty, and whether its contents are fluid or solid.—*British Medical Journal*.

Ziem prefers opening through the alveolar process, Mickulicz's method of operating through the nose being more difficult, more painful, and more bloody.—*Jour. Laryngol. and Rhinol*.

In an elaborate paper Adolph Bronner gives the notes of four cases and compares the different methods of operating.

Hartmann, of Berlin, and Stoerck, of Vienna, advocate the method of syringing out the sinus from either of the natural foramina in the middle meatus,

and, if these be not large enough, to enlarge them. We have seen that the wall separating the middle meatus from the sinus is very thin, and partly composed of mucous membrane only, which in many cases of disease of the nose is often absent, thus leaving a large and free opening between the nose and the sinus. For syringing out the sinus a common Eustachian catheter or small silver bent tube can be employed. The patient feels the fluid passing into the sinus, so that one can be sure when the proper opening has been reached. The advantages of this method are—1. It is the most natural way of syringing the cavity, as no new opening has to be made; 2. it is very simple; and 3. not at all painful. The disadvantages are—1. The opening is high up in the sinus, and it is therefore rather difficult to drain and syringe out properly; and 2. the nostril is often very narrow, so that it is difficult to introduce an instrument. Mickulicz of Krakau proposes to open the sinus by perforating the bony wall between it and the lower meatus, just under the middle of the lower turbinated bone. He uses a special instrument for the purpose. He holds this method to be superior to the method advocated by Hartmann and Stoerck, for the following reasons: 1. The opening is lower down in the sinus than the natural opening, and it is therefore easier to drain the cavity through this opening; and 2. there is not so much danger of wounding the orbit. In opening the sinus from the alveolus process, the first or second molar tooth is removed, if necessary, and a thick trocar or probe is passed through the alveolar into the sinus. The advantages of this method are: 1. The sinus is opened at its lowest part, and can therefore be drained and syringed very efficiently; 2. the field of operation can be overlooked. The

disadvantages are (and these seem to me to be very great): 1. The pus, etc., pass out into the mouth, giving rise to much nausea, sickness, etc.; 2. the opening readily closes up; 3. foreign bodies, especially particles of food, easily get into the sinus and keep up the suppuration; 4. the alveolar process is often very thick and hard to pierce; 5. there is danger of wounding the orbit; 6. a sound tooth has often to be removed; 7. a cavity is made to communicate with the mouth, which nature intends to communicate with the nose only; and 8. the operation is very painful, and an anæsthetic is generally necessary. The mode of treatment I should propose would be: 1. If pus points any where, open the sinus at that place; 2. in all other cases try and make use of or enlarge the normal opening in the middle meatus; 3. if this cannot be done, operate as proposed by Mickulicz. The alveolar process should, I think, be perforated only, 1. in very acute and painful cases; 2. if the nostril be narrow and there be not room enough to introduce an instrument; and 3. if the first or second molar tooth be loose, and pus flows freely from the socket, etc., on its removal.

The points to which I have endeavored to draw attention, and which are illustrated by the history of these few detailed cases, are—1. That the chronic form of empyema of the maxillary sinus is much more common than is generally supposed. 2. That in many cases there are no typical symptoms whatever. 3. That empyema is very frequently the cause of chronic and recurrent rhinitis, especially unilateral. 4. That empyema can give rise to the typical symptom of ozæna. 5. That it is in most cases caused by disease of the mucous membrane of the nose, and not by diseased teeth. 6. That in most cases the easiest

and simplest method of treatment is to open the sinus from the interior of the nose, and not from the alveolar process. —*Medical Analectic.*

A New Method of Mixed Narcosis.

ACCORDING to the Vienna correspondent of the *British Medical Journal*, Professor OBALINSKI recently proposed the following method of mixed narcosis, which he has repeatedly tried and found useful.

Pure chloroform is given to begin with in the usual way (that is, by means of Esmarch's mask) for from four to twelve minutes, the quantity of chloroform used being equal to from four to twelve grams.

A quantity of from three to five centigrams of a three to five per cent. solution of cocaine is then injected into the place to be operated upon.

There is no reason to be afraid of injecting even a larger quantity of cocaine, as chloroform, which is one of the best antidotes of cocaine, is administered at the same time; and also, because a part of the cocaine is removed by operation.

After the injection of cocaine Professor Obalinski does not use any more chloroform, especially when the operation is one of short duration; occasionally he employs it in small quantities and at long intervals of time.

The method has hitherto been employed in twenty-four cases, and the following are its advantages:

1. The advantages of both the general and local anæsthetizing methods are combined in it. Certain dangers proper to each of these methods are excluded by the combined procedure. The fact that a smaller quantity of chloroform is used gives greater confidence in its use, and besides at the same time a drug is employed which is known to be the best excitant, as it causes contractions of the blood vessels as well as of the cardiac

muscle, whereas chloroform paralyzes these organs. Again, there are individuals who have a certain idiosyncrasy in respect of cocaine; in these, even proportionately small doses of the drug produce disagreeable symptoms of cerebral anæmia, shown by "tinnitus aurium," pallor of the face, giddiness, etc.; and an antidote, such as amyl nitrite, chloral hydrate, chloroform, ether, or morphine, when administered at the same time, instantly causes all these disagreeable phenomena to disappear.

From all these facts it may be concluded that local cocaine anæsthesia in connection with semi-narcosis produced by chloroform is more reliable than pure chloroform narcosis.

2. Vomiting occurs much more rarely in mixed than in chloroform narcosis.

3. The patients awake more easily from the mixed narcosis, and do not feel depressed or weary.

The sole disagreeable symptom—and it is one of rare occurrence—is that there is more excitement, especially in nervous persons. This is manifested by crying, uneasiness, or strong tetanic muscular contractions. Similar symptoms are, however, also observed in pure chloroform narcosis.—*Therapeutic Gazette*.

Easy Method of Producing Large Anatomical Diagrams.

MR. W. T. THOMAS, in a letter to the *Lancet*, says that he has found thin sheets of mica coated with a varnish of one ounce of dried Canada balsam to two ounces of benzole to answer admirably. His mode of procedure is described as follows: Having coated the mica with varnish, lay it on the picture or engraving to be enlarged, trace the outlines on the varnished surface with a fine drawing pen and liquid Indian ink. Place this as the slide in an ordinary magic lantern (oil lamp gives ample

luminosity—I use an Argand reading light in the lantern) and the picture is enlarged to any size according to the distance of the lantern from the screen. I find it is better to use the wall as the screen where the paper or calico is hung, and it is an easy process to run over the outline on the material with a soft crayon. The tracing, fitting up, and drawing occupy on an average a quarter of an hour. Enlarging on the blackboard so that the lecturer may fill in is easily done by this method, the room being slightly darkened, absolute darkness not being necessary, as only black lines are required, and no fine features or tracery.

Local Treatment of Varicose Veins.

ROBERT (*Giornale de Farmacia*):

R.—Chloride of barium, 1 gr. 50; distilled water, q. s.; lanoline, 15 grams; oil of sweet almonds, 5 grams. Dissolve the chloride of barium in the distilled water by shaking, and then add the fatty mixture. Rub the dilated veins three times a day.—*Journal de Médecine*.

The Disinfection and Tempering of Rubber Drains.

THE proper disinfection of rubber drain tubes is of great importance; the more so, as its accomplishment is attended with considerable difficulty. Javaro shows that tubes are usually so affected by the usual processes of preparation as to be very much injured, and then fail to realize their intended purpose. To avoid softening (more especially of the red varieties), he advises that for five minutes they be immersed in concentrated sulphurous acid. He urges that the red variety should always be used in preference to the white kinds, as being more suited to withstand injury during his process. In the acid the tubes assume a dark chestnut color, and become hardened. Then they are

to be washed in alcohol, 75 per cent., and finally to be laid away in antiseptic preserving fluid—either 5 per cent. carbolic acid solution or 1-200 bichloride solution. Tubes so prepared will not collapse under even very considerable pressure. If they have become too hard, by working them between the fingers they can be much softened. After being treated in the acid, they are unaltered in any way further by preservation in antiseptic fluids. These tubes have now for a long time in his hands entirely replaced all other kinds, and he utilizes them for every possible purpose. They maintain their lumen even when placed between the ribs, and will not readily kink or become obstructed, yet are not so resistant as to exert dangerous pressure.—*Centralblatt für Chir.*

Antiseptic Gauze.

To prepare "antiseptic gauze," used for dressing wounds, etc., Professor GROSS directs:—Boil the gauze (to remove fatty matter) in a solution of $\frac{1}{2}$ lb. sodium carbonate to the gallon of water, for eight hours; rinse with clean water, and keep in the following solution: To the pint of ordinary bichloride of mercury 1 to 1000, add glycerine $\frac{3}{4}$ ss, alcohol $\frac{3}{4}$ j.

The Rapid Cure of Anal Fistula.

DR. LONGO concludes his thesis with the following statements (*Bull. Gén de Thérap.*):

1. The method ordinarily employed in the cure of anal fistula, while not entirely exempt from risk, necessitates constant attention for at least thirty days, and predisposes to relapse. 2. From the employment of the antiseptic method, a method of cure is possible in which the result may be attained in a much shorter time. 3. These processes, already employed with considerable

success, consist essentially in the entire excision of the fistulous structure and the reunion by the first intention of the outer surfaces. 4. Cure is ordinarily obtained within ten days. 5. The majority of fistulas are amenable to this treatment, which is exempt from danger, which is usually not followed by relapse, and whose employment is not accompanied by any insurmountable difficulties, with the single exception of the rigorous application of the antiseptic method. 6. When the fistulas are united, accompanied by extensive development of pathological tissue, or when their rectal orifice is situated very high up, or when the fistulas are accompanied by hemorrhoids, then this method is not applicable.—*Therapeutic Gazette.*

Macewen's Operation for Radical Cure of Hernia.

DR. H. L. BURRELL, in a paper read before the Suffolk County Medical Society, and published in the *Medical and Surgical Reporter*, said that:

He had operated in eight cases, all of which had been successful so far as heard from. In two of them scrotal abscesses formed. In the others union was by first intention. They have been in adults and in children; complicated and simple. As to permanency of cure, a sufficient time has not elapsed to be sure. Personally, he felt that at least three, and better, five years, should have elapsed. The operation is an attempt to restore the inguinal canal to its normal condition, and then the placing of an intra-abdominal pad in apposition with the internal surface of the internal ring. It is distinctly and strictly an operation devised and applicable to oblique inguinal hernia. As applied to femoral hernia the operation is incomplete, in that it does not close the crural canal. Dr. Cushing's operation fills this gap.

The intrinsic difficulty in closing a hernial opening is the preservation of the cord and its accompanying vessels; and previous to Macewen's operation he had come to the belief that the only satisfactory way of absolutely closing the hernial canal would be to enucleate the cord and testicle, and close the inguinal canal by a direct attack upon its intra-abdominal surface. This operation he once performed on a priest, but on account of the necessary mutilation it is not applicable to the ordinary patient.

The indications which had governed him in advising Macewen's operation have been: uncontrollable by truss hernia; painful truss hernia; and in one case he operated where there was great mental depression associated with the hernia.

The following points of importance have suggested themselves to my mind as bearing on the technique of the operation: *a*, the finding of the sac; *b*, the isolation of the sac; *c*, the troublesome hemorrhage and manipulation of the tissues; *d*, the introduction of the sutures; *e*, the dressing; *f*, the question of wearing a truss.

a. The finding of the sac. The strictest antiseptic precautions have been attempted. An incision of 2 or 2½ inches is made directly over the extreme ring, great care being exercised to bring the incision directly over the middle of the lozenge shaped opening and running in its direction. The wound is deepened until he met a rather thick white layer, which, on being divided, showed that he had entered a cavity, when he knew that the sac had been reached. He never attempted to isolate the sac without opening it; for the recognition of the cavity is the distinguishing point. Therefore the whole attention of the surgeon from the time

he makes the primary incision should be devoted to the finding of the sac. This saves time. If he cannot readily find the sac he allows the patient to partially recover from the ether and the sac is quickly distended.

b. The isolation of the sac. Once in the sac he prepares it for restoration to the abdominal cavity. When adherent, he fills the sac, through the small opening, with iodoform gauze, and thus distended there is no difficulty in dissecting it from the cord and the adjacent vessels. When, however, the sac is filled with omentum, congenital cases directly on or about the testicle, one has a difficult, tedious dissection to carefully separate it from the testicle and return it to the abdominal cavity. Occasionally he has had to divide the omentum into various parts and return the carefully secured ends to the peritoneal cavity.

c. The troublesome hemorrhage and the manipulation of the tissues, both of which may be avoided by the packing of the sac with iodoform gauze.

d. The introduction of the sutures. This is one of the most difficult points in the whole operation, and he has found that he could place them most accurately by a Hagedorn needle in a good holder. After carefully separating the sac the whole length of the inguinal canal and for half an inch around the intra-abdominal surface of the internal ring, he placed a stitch in the very extremity of the sac and transfixed it through and through and brought it out, after traversing the inguinal canal, through the muscles of the abdomen, pulling up the sac inside the abdomen in much the same way that a Venetian blind is raised. This suture is not fastened in position until the end of the operation, but it is temporarily secured by a pair of pressure forceps. Then

he carefully attempts to restore the valve-like form of the inguinal canal by stitching the conjoined tendon with strong silk or stout catgut to the aponeurotic structures of the transversalis, internal and external oblique. He usually places two, if not three sutures in position and, as he ties them, the assistant introduces his finger in the canal to determine how tightly he brings the parts together.

e. The dressing. The operation proper is finished when the inguinal canal has been closed. Lately he had dispensed with drainage, but after a thorough and effective flushing with a solutio, 1 to 1 ½ corrosive sublimate, the superficial wound is closed with continuous catgut sutures. The dressing proper consists of six sterilized gauze pads 6x8x½ inches superimposed, covering the wound surface and the scroto-femoral cleft. This is held in place by a carefully applied gauze bandage 4 inches wide, just tight enough to steady the dressing in place. Over this is laid a piece of mackintosh with a hole in it for the penis. This is covered by sterilized sheet wadding. This is secured in position by a cravat gauze bandage, 6 inches wide and long enough to form a double spica bandage. Over this is another piece of mackintosh with a hole in it for the penis. This is secured in position by safety pins as necessary.

f. The question of wearing a truss. There is little doubt that the wearing of an ordinary truss after hernia operation is open to the objection that pressure on cicatricial tissue is usually followed by gradual absorption; but as he does not feel safe with nothing, he has adopted the movable truss, such as recommended by Pye, which does not exert any undue pressure on the cicatricial tissue.

VENEREAL DISEASES.

Gonorrhea.

MANY are troubled with the difficulty with which this disease is combated. If it only be considered as an inflammation of a mucous membrane with a specific or microbic cause, the appropriate treatment becomes simple enough. We will first consider treatment by injections. Sulphate of thallin, four grains to the ounce of distilled water, is said to cut short the disease with a few applications.

We have found excellent results from one grain each of cocaine, morphine, atrophine, chloral hydrate, sulphate of zinc, and sulpho-carbolate of zinc to the ounce of distilled or rose-water. After the acute stage has subsided, withdraw the cocaine first, then the atropine, and then the morphine, continuing with the chloral and the zinc salts as long as there is any irritability of the urethra.

The king of injections for lingering subacute gonorrhea or gleet, is the following. \mathcal{R} Ext. hydrastis fld., f ̄ j; bis-muthi subnitrat, 3 j; boroglyceride (50 per cent.) mucil. acaciæ, āā f ̄ ss. M. Sig. Use as an injection.

The constitutional conditions to be considered are plethora and debility. Plethora increases the intensity of the inflammatory stage and protracts its duration. The only remedy necessary is saline laxatives during the stage indicated. Debility prolongs the subacute stage and favors chronicity. Tincture of the chloride of iron (always given some time before meals) is the most appropriate remedy for the condition, commencing with the beginning of the subacute stage.

As internal treatment the sulphide of calcium should be given from the start, and during the entire period of suppuration, one-tenth grain ten times daily.

If debility exists, one grain of lactophosphate of lime should be taken with each dose.

The following is an excellent combination to be taken from the very first: \mathcal{R} . Tincturæ opii, f 3 ij; vini colchici seminis, f 3 ss; liquoris potassi citratis, f 3 viss. M. Sig.: One tablespoonful four times a day.

The oils of eucalyptus, sandal wood, cubebs, and turpentine, and the balsam of copaiba are all useful as additional remedies in cases which show that they are not yielding readily to the regular treatment.

This is simply an outline of a course of treatment which has proven more than usually successful, omitting the long list of remedies that are objectionable for any reason—*Medical World*.

Compound Gonorrheal Infection.

THE accidental or more or less accidental presence of two specific micro-organisms in the same subject has often been observed. Thus, the bacillus of tubercle and the special germ of erysipelas may be found together, or the gonococcus may be detected in company with the septic micrococcus of puerperal fever.

Dr. BUMM, of Wurzburg, claims to have discovered certain true compound infections (*mischinfectionen*) where the first germ has really caused the entry of the second, or, rather, rendered the tissues more fit to receive it. The first germ, in the cases which he has investigated, is the gonococcus, the second is in some instances a progenic micrococcus, in others the bacillus tuberculosis. When fresh gonorrheal discharge enters Cowper's gland, it tends to destroy the glandular tissue and to cause cystic degeneration; but when the pyogenic staphylococcus follows the gonococcus, suppuration occurs, and the pus-pro-

ducing micro-organism supplants the specific germ of gonorrhea. This is always the case in the compound infection which Bumm has investigated. The urethral follicles may be infected in the same manner, and so may the mucous membrane of the bladder. The gonococcus cannot readily penetrate the stratified vesical epithelium, but it favors the entry of another coccus, which is pyogenic. In the upper part of the genital tract the gonococcus itself only attacks the mucous membrane. Had it the power of penetrating deeper, gonorrhea would, as a rule, be a very dangerous disease. However, the gonococcus favors the entry of more dangerous germs into the pelvic connective tissue. Thus Bumm discovered staphylococcus aureus in abscesses formed in two cases of gonorrheal parametritis. In two other patients who had parametritis without abscess, as a result of gonorrhea, he punctured the phlegmon, and found that the little fluid which drained away was entirely free from germs.

The higher the gonorrheal infection extends above the cervix uteri, the less will be the chance of compound infection, for the vagina and vulva, favorable receptacles for all kinds of germs, will be far from the infected regions. Hence few micrococci besides the gonococcus can be found in gonorrheal discharge from the uterus, and hardly any in the Fallopian tube. Thus it is in the tubes that the pure specific action of the gonococcus may best be studied. The tubal mucous membrane may become the seat of purulent inflammation, but the subjacent connective tissue escapes. Should any of the gonorrheal pus escape through the ostium into the peritoneal cavity, the tube is rapidly closed up by circumscribed peritonitis. When pyogenic micrococci enter the peritoneal cavity as when a puerperal para-

metric abscess bursts, severe diffused peritonitis almost certainly follows. Dr. Bumm doubts if any authentic case of compound gonorrheal infection of the tubal mucous membrane has been noted.

Thus there appears to be a distinct compound infection where gonococci prepare the tissues which they infect for pyogenic germs such as streptococci, staphylococci, etc., the latter rapidly supplanting the gonococci, as above explained. In a limited series of cases, tubercular changes in the epididymis have been known to follow closely on an attack of gonorrhœa. Dr. Bumm believes that tuberculosis of the Fallopian tubes often arises in the same way: his theory explains, in his opinion, the origin of the tubercular masses which are sometimes found in the tubes in subjects free from tubercle in any other part of the body. The dried up pus in an old pyosalpinx is a favorable cultivating medium for the bacillus tuberculosis. He succeeded in curing, or almost curing, a young woman of gonorrhea of the cervix and repeated attacks of parametritis on the left side. She married, and two years later returned to hospital, where she died of isolated tuberculosis of the left Fallopian tube. The patient had never conceived, and the husband was phthisical.

Dr. Bumm shows that it was in female subjects that the first researches were made to determine the nature of the fluid found in the synovial cavity of a joint affected with gonorrheal rheumatism. True pyogenic micrococci were discovered, but no gonococci could be found. This fact is entirely in accordance with his theory and demonstration of compound gonorrheal infection. The genito-urinary mucous membrane damaged by the ravages of the gonococcus, allows the entry of pyogenic micro-organisms into the

deeper tissues. He admits that nobody has been able to explain why the more formidable and less specific germs make for the articulations, and more especially select the knee-joint.—*British Medical Journal*.

Operation for a New Bladder.

PROFESSOR TIZZONI, and Dr. Poggi, of Bologna, according to the *Lancet*, have devised and carried out an extremely ingenious operation for the purpose of "restoring" the bladder in cases where it is partially destroyed by disease. The object of the operative procedure is to replace the bladder by means of a substitute, that substitute being a portion of intestine. The operation (on an animal) was performed in two stages, an interval of about a month elapsing between them. The first part of the operation consisted in the cutting out of a portion of the intestine, the two ends from which it was taken being immediately sutured; the mesentery was left attached to the excised portion. The ends of this portion were then closed so as to form a sac; one end was then brought down and fixed to the neck of the bladder. The second portion of the operation consisted in separating the ureters from the bladder, excising the latter organ, suturing the intestinal sac in the position of the bladder, and grafting the ureters on to its posterior wall. For a few days there was incontinence of urine, but after about a fortnight the sphincter regained its power and the animal recovered completely. In consequence, however, of the small size of the new bladder, micturition was necessarily very frequent, and the operation will be repeated on another animal, taking care to excise a larger portion of intestine, so as to imitate more nearly the normal capacity of the bladder.

New Method of Total Amputation of the Penis.

DR. MONTAZ, of Grenoble: A raquet or oval shaped incision is made, the point of which starts from the symphysis pubes. The two branches surround the penis, descend along the scrotum and join at its inferior border. The extirpation of the penis is then proceeded with as in the removal of the breast, tying the arteries as they are cut. Six arteries require the ligature, two cavernous, two dorsalis penis, and two transverse branches of the external pudic. When the ablation is finished, there is a considerable wound with the urethral orifice in the centre. The testicles and the cord are exposed and can be removed if diseased. A grooved director is then introduced into the urethra, so as to push forward the perineum; the urethral canal behind the bulb is now widely opened and the mucous membrane sutured to the perineal skin. The operation wound is now obliterated. As a last step in the operation the posterior aspect of the scrotum is brought forward and sutured at the pubis at the point of the raquet-shaped incision. Provision is made for drainage. When the operation is finished the testicles are covered and there remains only a line of suture, resembling the inverted letter A. The patient urinates through the perineum, and the operation wound is in the best antiseptic condition for healing, and non-recurrence.—*Congress of French Assoc. for the Advancement of Science at Oran (Algiers).*—*Lux. Jour. of Surgery.*

DISEASES OF THE SKIN.

The Treatment of Psoriasis.

DR. J. V. SHOEMAKER, in an article on The Cause and Treatment of Psoriasis, published in *Medical Bulletin*,

discusses the treatment of this intractable affection as follows :

From the brief account thus given of psoriasis, it will be seen that, once recognized, the disease is not only amenable to treatment, but can be cured. The cause of the affection, as has been stated, is, however, too often passed by unobserved, and then the treatment—by the usual routine, arsenic method—is frequently followed by a failure to cure the disease, or relapses after an apparent success. The treatment to be pursued in any case of psoriasis, therefore, depends always on the exciting cause. The majority of those suffering from the disease will require hygienic measures, together with internal and external medication. The most important hygienic rules to be followed consist in plenty of exercise, especially in the open air, with a judicious amount of bathing, in order that the skin that has been rendered inactive by the infiltration, may take upon itself some activity, and be thus enabled to free the system of the morbid products that assist in keeping up the inflammation. Passive exercise may be instituted, and the skin rendered pliant and active by systemic massage. The latter means is most beneficial in chronic cases of psoriasis by awakening the dormant state of the skin, lessening the thickened leathery condition that follows from long continued infiltration, and becomes a most useful agent in promoting the activity of the skin and in assisting in relieving and curing the disease. The rule in treating psoriasis is usually to apply some stimulating preparation or dressing to the red and thickened patches until the morbid condition yields to the local application. The glands of the skin to which the application is thus made, unfortunately, often become filled with the substance employed, and the skin, as a result, be-

comes inactive; the morbid products yet remaining within, in place of being forced out upon the surface, become in turn active factors in again producing infiltration of the integument.

Exercise and bathing, with in very chronic cases, massage, used in conjunction with the local treatment, which will be alluded to presently, will not only thus prevent the skin from becoming dormant, but will also restore it to activity and assist materially in relieving and curing the disease. The hygienic rules just referred to which are the very best means at the disposal of the physician, are most unfortunately in very many instances entirely neglected for the commonly accepted plan of treatment by arsenic and stimulating ointments.

In reference to the employment of internal medication, cases of psoriasis depending upon rheumatism yield well to either of the salicylates, oil of winter-green, acetate of potassium, digitalis, and the sweet spirits of nitre, quinine, antimony, turpentine, and the iodide of potassium. The iodide of potassium, to which reference has just been made, is one of the very best agents for eradicating the disease in rheumatic patients. Grave, Boeck, and Holland have reported a number of cures from the iodide of potassium in large doses. Again and again have I observed also in many cases the curative action of this drug in large and frequently repeated doses, often from ten to thirty grains being taken every three or four hours during the day. The class of cases, however, in which this drug in my experience has been most beneficial has been those having either a rheumatic or gouty condition of the system. Gouty subjects having psoriasis often do well on colchicum, guaiac. the preparation of lithium, and the various alkaline waters. Cases in which the

disease owes its existence to a nervous origin require phosphoric acid, oxide of zinc, nitrate of silver, the protochloride of gold and sodium, arsenic, and often the addition of galvanism. The anæmic do best upon the preparations of iron and arsenic, and those arising from imperfect assimilation can often be cured by a proper course of dietetics, with the use occasionally of cod liver or chaulmoogra oils.

In concluding the recommendation for internal treatment, I have purposely left the reference to the use of arsenic to the last agent of which I shall speak. Arsenic in one or the other forms in which it can be given, while a valuable agent for the treatment of chronic psoriasis, yet in very many cases is a much abused remedy, upon which too much dependence is placed. No sooner is the disease recognized, very often, than the patient is at once subjected to a rigid arsenical treatment, and the many other judicious means of managing psoriasis are entirely ignored. The result is too often, that the arsenic treatment fails to act, and the disease is continued indefinitely or becomes better to again relapse into its former condition. Arsenic, however, is at times, in cases arising from various causes—providing the proper hygienic rules are adhered to and the secretions are kept active—a valuable agent. It may act well given in the form of one of the solutions, or as one of the salts given in pill form. The best results which I have observed, however, from the action of arsenic in psoriasis, is from giving it hypodermically, care being taken at the same time to keep the skin, alimentary canal, and kidneys active by the hygienic measures already referred to, together with the use of diaphoretics, diuretics and cathartics if necessary. In administering arsenic hypodermically

full doses must be given if a good effect is to be expected. The beginning dose should be from one-tenth to one-quarter of a grain of arsenious acid or the arsenite of sodium increased to one-half a grain every two or three days. The hypodermic injection in fat subjects can be deposited deep into the cellular tissue, and in lean individuals, in the muscular tissue. Arsenic given in this manner often acts more decidedly in chronic cases of psoriasis than when administered by the mouth. At times, patients will not permit the use of the hypodermic needle, and under such circumstances suppositories of from one-quarter to half a grain of arsenious acid or arsenite of sodium, once or twice a day, will at times prove equally as serviceable.

Local treatment. Local measures, as bathing and massage, to which I have already referred, with the use of soap, oil, bandages, and various dressings, are all of great advantage in assisting to remove the infiltration and render the skin active. The thickened skin may also be removed by the employment of any one or the other of the numerous stimulating preparations in the form of medicated soaps, plasters, ointments, solutions, and fixed dressings. Naphthol, or one of the preparations of tar, carbolic acid, creasote, the mercurials, anthrarobin, chrysarobin, pyrogallie acid, may be used alone or variously combined, and applied in one of the above forms for the purpose of stimulating the infiltration, and thus removing it from the surface. The combination and application of the above preparations are now pretty well known to all physicians, and are spoken of at length in all the works upon diseases of the skin, and it will therefore be unnecessary for me to reiterate them in this paper.

In conclusion, however, I wish to again repeat what I expressed as the purpose of this paper—first, that psoriasis is always dependent upon a constitutional cause, as set forth in the observation already made in the opening of this subject. Secondly, that inasmuch as psoriasis is due to systemic disturbance, it can only be cured by removing the exciting cause with hygienic measures, with internal medication, assisted by local applications. The local treatment, while an adjunct in rendering the skin active, is, in my opinion, in no way, conducted alone, capable of permanently eradicating the disease without tendency to relapses.

Removal of Subplantar Corns.

UNNA (*Monatshefte für Prakt. Dermatologie*) states that the treatment of subplantar corns is very much facilitated by a judicious combination of salicylic plaster and glycerine jelly. A ring of glycerine jelly about the diameter of the wart is painted round it with a fine but stiff bristle paint brush. When this ring of jelly has quite set and become dry, a circular piece of the strongest salicylic plaster muslin (salicylic acid and creasote, each 40 parts) is cut sufficiently large to fit within the ring of jelly; jelly is now painted over the ring of jelly already made, and the piece of plaster itself; and to make assurance doubly sure, a third coat of jelly should be painted widely over all; and when these have become almost dry, a layer of cotton wool is to be placed and pressed on. The larger the surface covered with the jelly the less the local pressure on the corn. In the case of feet which perspire much, especially in hot weather, a single turn of a soft muslin bandage should be folded round the affected part of the foot, before the jelly has become quite

dry, covered with a coating of jelly and then with wool, or a coating of the jelly itself, and the neighboring part of the foot painted with flexible collodion. In this way one can keep the plaster in position, even in the heat of summer and in those whose feet sweat freely. The dressing is changed when it becomes spontaneously loose—at the oftenest, once or twice a week; the horny layer acted on by the salicylic acid is removed, and a new dressing applied; and this had better be continued for some time after the wart has been cured.—*Edinburgh Medical Journal*.

Pommade to Dye the Hair.

PROFESSOR HASKOVEC recommends as a base for the preparation of pommades to dye the hair with a mixture of one hundred grammes of lanoline and twenty grammes of lard, rendered aromatic to suit the taste with the essence of rose, etc. To dye gray hair the original color of which was brown, he adds to this pommade a solution of five grammes of nitrate of bismuth and three grammes of citric acid in twenty grammes of glycerin. If, on the other hand, it is desired to dye white hair which formerly was black, there should be added to the pommade as its excipient a solution containing two grammes of the extract of walnut (*juglans regia*) and three grammes of pyrogalllic acid in just a sufficient quantity of water. These pommades give excellent results.—*La Science Pratique*.—*Medical Reporter*.

DISEASES OF THE EYE AND EAR.

New Operations for Deafness Caused by Obstruction of Eustachian Tube.

DR. A. E. CUMBERBATCH and Dr. W. E. STEAVENSON:

The great success which has followed the treatment of stricture of the urethra

and other mucous passages by electrolysis suggested the idea that an obstructed Eustachian tube might be opened up by the same means. At the latter part of last year several bougie electrodes were made of a number of fine copper wires about seven or eight inches long, insulated by vulcanite to within an eighth of an inch of their ends. The ends of the wires are soldered into a nickle-plated metal cap. The bougie



is small enough to pass along the catheter, and exceeds it in length by about one inch. The handle end of the bougie is provided with a binding screw, to which the insulated copper wires are also attached, for the purpose of connecting a rheophore from the battery. On this end of the bougie an inch is marked off divided into eighths. Each eighth of the inch

passes into the catheter as one-eighth protrudes at the other end. It is therefore possible to tell, when the catheter is in the orifice of the Eustachian tube, how much of the bougie is in the canal. On the catheter there is a metal ring, or some other mark, as in all catheters, to indicate the position of its end when it is being inserted.

Electrolysis of the Eustachian tube is performed in much the same way as the electrolysis of the other mucous passage. A pad connected with the positive pole of a battery is moistened and placed at the back of the patient's neck. The Eustachian catheter is then passed

along the nostril into the tube, and the bougie, already attached to the negative pole of the battery, is passed along it as far as it will go, until it meets an obstruction. The circuit is then closed. A galvanometer should be included in some part of the circuit, and the strength of the current increased until a strength of four milliamperes is obtained. A frizzling noise will be heard by the patient in his head, usually likened to the frying of fish; and the operator by approaching his ear to the catheter, can hear the crackling produced by the frequent breaking of minute bubbles of gas. The electrolysis is kept up for four minutes, and usually before the expiration of that time, if it is possible that the obstruction can be removed, the bougie can be pushed on for a small distance, sometimes for its full length. Generally on the first occasion the Eustachian tube is rather sensitive, but it seems to acquire toleration for the process, and at no time is so much discomfort experienced as might be expected from setting up chemical decomposition in the middle of the head. We have now performed the operation a large number of times, and have not met with any unpleasant experiences, nor has the treatment caused any thing more than very temporary discomfort to our patients. We have tried the treatment in a large number of cases in which the deafness has been due to a simple obstruction of the Eustachian tube, and the results have been most encouraging.—*Medical Abstract.*

On the Diagnostic Value of Hemorrhage from the Ear in Head Injuries.

DR. C. D. BENNETT (*Medical News*):

The personal observation of the author is as follows: A man of 28 fell in an elevator seven stories. One of

the large supporting beams of the cage fell after him, striking him in the face, and causing a fracture of the alveolar process of the lower maxilla. Three-quarters of an hour after the accident the patient was conscious, but very irritable, and presenting no other brain symptoms. Pupils equal and normal in size. The hemorrhage was profuse from the nose and from both ears.

The next day the hemorrhage from the ears continued in lessened amount, and a patch of subconjunctival ecchymosis had appeared on the left side. General condition improved. The hemorrhage ceased during the following night. Two days later a tumefaction appeared behind both ears, which had every appearance of being inflammatory, but which disappeared in two days more by the use of cooling lotions. Seven days after the injury the ears were examined by Dr. T. Y. Sutphen, who says: After removing the clot found in both ears, I found the external canal red, and swollen slightly anteriorly and superiorly. No wound could be detected. Membrane red, but not perforated. Hearing watch four feet from each ear, or nearly normal. No hemorrhage in middle ear.

In his opinion the base of the skull had been fractured, and the blood had perforated at the side of the membrane, not through it.

This patient continued to improve, suffering only from occasional headache and vertigo, and with these symptoms continuing in steadily lessening severity, he was discharged practically well in a month.

The author concludes: That hemorrhage from the ear is, in itself, no evidence of fracture of the base, and that, even in conjunction with other symptoms, it must only be regarded as presumptive evidence. The membrana

tympani should be examined, and if found intact, it is pretty certain that no fracture of the base exists. He thinks that all the signs of fracture of the base may be present with mere concussion of the brain, and that therefore the two injuries cannot always be differentiated. Many recorded cases of recovery from such injuries, he thinks, were only cases of concussion. In his case the author thinks that the severe blow on the jaw drove it violently backward in such a way as to injure, perhaps fracture, the anterior wall of external auditory canal.

Hydatid Cyst of the Orbit.

At the Ophthalmological Society of London, Dr. ROCKLIFFE brought forward a case of suppurating hydatid cyst of the orbit. The patient, a laborer aged 33, had first noticed an affection of the sight of the left eye in 1882. He had several attacks of inflammation in it, and the vision gradually deteriorated till, in April, 1887, he was quite blind with it. There was then marked protrusion, some ptosis, and the action of all the ocular muscles, except the external rectus, was very limited. Nothing definite was made out as to the condition of the orbit. Eighteen months later, having had more attacks of pain, the patient consented to an operation. An exploratory puncture with a scalpel having given no results, the orbit was more freely opened up and, the eye being removed, a suppurating hydatid cyst was found at the apex of the orbit. The rarity of the affection and the difficulties of diagnosis were briefly alluded to. Mr. Brailey asked if there were hydatids in other parts of the body. In one case he had seen it would have been impossible to have made the diagnosis if the bosses caused by the development of hepatic hydatids could not have been

felt. He thought that in Dr. Rockliffe's case the dydatid had developed in the substance of one of the ocular muscles. Mr. Hulke had only seen three or four cases, and he thought an absolutely certain diagnosis could not be made. In one of these cases there had been suppuration. He did not see how suppuration could be caused by rupture of a daughter cyst. Dr. Rockliffe, in reply, said that the patient attributed the suppuration to a blow with a piece of iron. No hydatids could be found elsewhere. He thought it had developed behind the eye, and not attached to the muscles, for the patient had free movement in every direction.—*Lancet*.

Hygiene of the Eyes.

Dr. LINCOLN, of Boston, in *The Annals of Hygiene*, formulates the following rules to be observed in the care of the eyes for school work :

1. A comfortable temperature, and especially let the feet be warm and dry.
2. Good ventilation.
3. Clothing at the neck loose ; the same as regards the rest of the body.
4. Posture erect ; never read lying down or stooping.
5. Little study before breakfast or directly after a hearty meal ; none at all at twilight or late at light.
6. Great caution about study after recovery from fevers.
7. Light abundant, but not dazzling.
8. Sun not shining on desks or on objects in front of the scholar.
9. Light coming from the left hand, or left and rear, under some circumstances from in front.
10. The book held at right angles to the line of sight, or nearly so.
11. Frequently rest by looking up.
12. Distance of book from eye about fifteen inches.—*Journal American Medical Association*.

THE AMERICAN MEDICAL DIGEST.

PART III.

Diseases of Women and Children.
and Obstetrics.

CONSTITUTIONAL DISEASES.

Rieck's Treatment of Diphtheria.

FROM the Berlin correspondence of the *Medical and Surgical Reporter*, we extract the following:

Dr. Rieck's proposal to treat diphtheria with yeast, though theoretically interesting, will find but little appreciation with the practitioner of medicine. Rieck's treatment is based on the fact that the gastric contents in diphtheria, just as in cholera, scarlet fever and measles is always alkaline. The yeast cells—*cerevisiæ*—proliferate only in a neutral or slightly alkaline soil, which at the same time contains sugar. They furnish carbonic, acetic and lactic acids. The latter acid has been extensively used in the treatment of diphtheria, though rarely ever in quantity sufficient to acidify the gastric contents. If lactic acid is pushed that far the proliferation of the yeast cells stops simultaneously with the reduction power of the micro-organisms, and recovery takes place. The proposal is, in other words, an attempt to combat the specific diphtheria germs with proliferating heterogenous cells—a fight between bacillus and cell on a common soil, the blood. The method constitutes, therefore, an experiment the reverse of a pure culture.

Another suggestion regarding the treatment of diphtheria, made by Dr. Gaucher, of Paris, to cauterize the deposits with the Paquelin cautery, will not be received with greater enthusiasm than Rieck's proposal. Gaucher has saved 17 cases by this method, and Dubousquet has treated 81 cases with a mortality of only five per cent. Gaucher's method, by the way, is nothing new, for a German physician proposed the same treatment in 1885. Your correspondent in that year assisted Professor Henoch, of the Royal Charité, in the cauterization

of deposits in a grave case in a girl thirteen years old. The girl recovered and as Professor Henoch thought only as the result of this treatment. Nevertheless, the cauterization treatment has never been adopted by Professor Henoch nor by any other German pediatricist. It is clear, that this treatment can only be of avail in the initial stage of the affection, before the specific germs have entered the circulation. Besides, the treatment is undoubtedly too heroic ever to become popular.

Vlemingcx's Solution in Diphtheria.

VLEMINGCX's solution has long been known in the treatment of disease of the skin as a very active agent in certain cases. Dr. George E. Hubbard states in the *Medical Record* that he uses the clear solution undiluted by means of a spray, in cases of diphtheria, every half hour until the disease is under control and then at longer intervals. He states that under the use of this solution in spray, even sparingly applied, the diphtheritic patches undergo a change in a few hours. The temperature soon subsides, and a general improvement in the condition takes place almost from the first application. In some cases the patches disappear entirely in a day. If the false membrane has developed rapidly before the physician has seen the patient, under the influence of the spray, it will be effectual even then in arresting systemic poisoning, and sooner or later the tough membrane will detach itself. Do not by any means allow the patient to swallow any portion of the false membrane.

We append the formula for the preparation of this solution. It is as follows: \mathcal{R} . Calcis, $\bar{3}$ ss; sulfuris sublimati, $\bar{3}$ j; aquæ, $\bar{3}$ x. M. Coque ad $\bar{3}$ vj et filtra.

The boiling of this must be carefully done over a water bath in a graduated

vessel. The filtration must also be closely watched, and the filtrate should be perfectly clear.—*St. Louis Medical and Surgical Reporter.*

Prescription for Diphtheria.

WE have used for many years the following gargle with marked relief to the patient. \mathcal{R} . Tr. ferri chl., \mathfrak{z} ii; ol. gaulth., m. xx; spts. ether. nit. \mathfrak{z} i; glycerine, \mathfrak{z} ss; sat. sol. kali chl., ad \mathfrak{z} iii. M. Sig. Dilute with equal parts of water and use as a gargle, or apply with a camel's hair brush.

Formula for Creasote.

DR. KEFERSTEIN gives some formula in the *Therapeut. Monatshefte*, which have proved useful in his practice. The following formula, he says, gives a clear mixture which tastes and smells decidedly better, and is also cheaper, than the formula suggested by Bouchardat, which contains Malaga wine:

\mathcal{R} . Creasoti, \mathfrak{M} xx; spir. vini rectificat, f \mathfrak{z} vi $\frac{1}{3}$; aq. cinnamomi, f \mathfrak{z} iiiss; syr. cinnamomi f \mathfrak{z} vi $\frac{1}{3}$. M. Sig. A tablespoonful three times a day, increasing one tablespoonful weekly.

The following formula is for administration of the creasote in pill form: \mathcal{R} . Creasoti, \mathfrak{z} i; powd. althea root, \mathfrak{z} iss; licorice juice f \mathfrak{z} iss; mucilage of acacia, q. s. ut fiant pil. No. 120; coat with gelatine. Sig. Six pills three times a day.

When there is much cough and diarrhea, the following may be given: \mathcal{R} . Creasote, gr. xv; acetate of lead, opium (pure) $\overline{\text{aa}}$ gr. ivss; licorice juice, f \mathfrak{z} iss; mucilage of acacia, q. s. ut fiant pil. No. 50. Sig. Five pills three times a day. Five pills contain one and one-half minims of creasote.

Instead of giving the creasote in cod liver oil, Keferstein has the following emulsion made, which can be taken even

by children: \mathcal{R} . Creasoti, \mathfrak{M} xx; solve in olei amygdalæ, f \mathfrak{z} viiss; pulv. acaciæ, \mathfrak{z} v; aq. destil, f \mathfrak{z} iiiss. M. Ft. emulsio. Adde, tinct. aurant. comp., \mathfrak{M} xv; oleosach. menth. pip., f \mathfrak{z} i. M. Sig. A tablespoonful from two to five times a day.

In the case of children it will be sufficient to make up half the quantity, and give a teaspoonful of it at a time. One tablespoonful of this emulsion contains one and one-half minims of creasote. If the taste of oil is detected, black coffee may be given after it.

The following formula is suitable for giving creasote in the form of drops: \mathcal{R} . Creasoti, \mathfrak{M} xl; tinct. cinnamomi, f \mathfrak{z} viiss. M. Sig. Fifty drops three times a day, or one-half teaspoonful in a cup of warm milk, added while the milk is vigorously stirred. Twenty-five drops of this mixture contain one and one-half minims of creasote. Instead of milk, wine or warm sugar and water may be used; but if alcoholic fluids are used they should be cold, while if non-alcoholic fluids are used—the best of which are mucilaginous—they should be warm.—*Wiener Med. Presse.—Medical and Surgical Reporter.*

Gargle to Prevent Loosening of the Teeth.

\mathcal{R} . Acid tannic, \mathfrak{z} ij; tinct. iodi, gtt. 75; potas iodid, gr. 16; tinct. myrrhæ, gtt. 75; aquæ rosæ, \mathfrak{z} 6 $\frac{1}{2}$. —M. A tablespoonful of this mixture in a third of a glass of warm water to bathe the gums with, after finishing the toilette of the mouth, will, in the end, remedy the loosening of the teeth.—*Union Méd. de Paris.—Med. Reporter.*

Artificial Carlsbad Salts.

THE fulsome advertisements of these salts in various ways may have tended to obscure the fact that very cheap and effective artificial preparations can be

made. One of these is that suggested by Ziemssen: Sulphate of sodium, 40 parts; carbonate of sodium, 6 parts; chloride of sodium, 1 part. This should be dissolved in hot water, then the latter evaporated, the remaining salt powdered, and a proper dose of this (one-half teaspoonful) taken in hot or carbonated water.—*Medical Record*.

Pleurisy.

THE *Medical World* gives the following prescriptions:

℞. Antimonii tartarati, gr. j; vin. ipecacuanha, dr. j; aq. dest., oz. viij. One teaspoonful every hour. In acute pleurisy.

℞. Potass. iodidi, gr. xxxij; syr. ferri iodidi, oz. j; glycerini, oz. j. One teaspoonful twice a day. In children's pleurisy.

℞. Potass. nitratis, dr. ij; liq. ammon. acetatis, oz. ij, dr. ij; sp. ammon. arom. dr. ij; tinct. aconiti, dr. ss; aq. dest. ad., oz. viij. Two tablespoonfuls every five hours.

℞. Ammon. carb., dr. ss; sp. chloroformi, dr. iij; vin. colchici, dr. ss; liq. ammon. citratis, oz. iiss; mucil. acaciæ, oz. iv; aq. dest. ad., oz. viij. Two tablespoonfuls every four hours.

℞. Pil. hydrarg., gr. ij; fol. digitalis, gr. ½; pulv. scillæ, gr. iss. Make one pill, to be taken twice or thrice daily.

Urechites Suberecta.

A CORRESPONDENT of the *Age* sends the following contribution:

We have received an inaugural dissertation by Mr. Minkieviescz, entitled "Contribution to the Knowledge of the Active Constituents in Urechites Suberecta." The investigation was made in the pharmacological institute of the University of Dorpat, under the assistance of the eminent scientists, Professor Dr. Rudolph Kobert and Professor Dr.

Dragendorff. It goes with detail into the chemical composition of the drug, into the toxicology of the same, etc., giving a large number of experiments, and giving the results of 36 experiments with the active principles derived from said drug on different animals. To our readers particularly the resumé of the results will be of interest. The results condensed have been proven to be the following:

1. In the drug urechites suberecta there are two poisonous principles contained, which can be separated one from the other—a glucoside and an acid resin.

2. Both bodies are equally poisonous and give us the same symptoms of poisoning.

3. They are not protoplasmic poisons.

4. They influence the axio-motoric apparatus of the heart and the heart muscle, and kill through heart systole.

5. They cause central and the peripheral irritation of the vagus, with resulting paralysis of the vagus.

6. They increase the blood pressure through stimulating the heart's activity, then reduce it through decrease of the heart's frequency and heart's energy.

7. They exert no influence on the peripheral vessels, possibly on the intestinal vessels.

8. The central nervous system is influenced in the sense of a paralysis.

9. They probably reduce the working capacity of the muscle.

10. They are emetics of a central action.

11. They produce changes in the intestines which cause an increased peristaltic action.

12. They cause an increased secretion of the saliva.

The author states that after the experiments made on animals, he could not make up his mind to experiment

with the active constituents on man, especially as he could not theoretically deduce in which symptoms urechites suberecta could be theoretically supplied. As an emetic, laxative or heart poison, it is inferior to some remedies already known and cannot replace them.

Convinced, therefore, that urechites only deserves, he is sorry to say, a purely toxicological interest, he found it advisable to discontinue the therapeutic part of his investigation.—*Medical Age*.

Rheumatism.

DR. J. POLLOCK, in his post-graduate lecture, delivered at Charing-Cross Hospital, and published in the *Lancet*, makes the following interesting statements on treatment:

The treatment of rheumatic fever a few years ago was most unsatisfactory. I have seen alkalies, quinine, blistering and other reputed remedies tried in a large number of cases, alone or in combination, but without being at all impressed by their value. Some ten or twelve years ago a new and improved method of dealing with the disorder came into operation, the use of salicin as a remedy, which ultimately led to the introduction of salicylate of soda, one of its derivatives.

I cannot say that I have had much success with salicin, though I have tried it in a number of cases, but he must be blind indeed who cannot perceive the great value of the soda salt. There may be some doubt as to whether its use shortens the duration of rheumatic fever, but beyond question it robs the disease of some of its most painful symptoms. In a few days, sometimes hours, the temperature is brought down, the inflammation and pain in the joints subside, and the patient is in most cases practically convalescent.

It is not claimed for salicylate of soda

that it will prevent the occurrence of heart complications, or even hyperpyrexia, but it lessens the chance of either mischief by rapidly reducing the fever. It must also be borne in mind that the drug is not an absolute specific. Where shall we find one? It fails to relieve or cannot be tolerated every now and then. But this is no more than what happens with quinine in ague, or iodide of potassium in syphilis. Salicylate of soda sometimes produces sickness, deafness, tinnitus aurium, and a peculiar kind of cerebral disturbance; but these disagreeable effects quickly disappear on a discontinuance of the drug, and seldom return upon its resumption after a short interval. The salicylate has been charged with producing serious cardiac depression, even causing sudden death; but the evidence on these points is not very clear, and personally I have never witnessed any such effects.

In treating a case of articular rheumatism, the salicylate of soda may be given in doses of ten, twenty, or even thirty grains every two, three, or four hours, according to the severity of the symptoms and the effect produced. Where there is evidence of great acidity, some alkali (five to fifteen grains of the bicarbonate of potash) may usefully be combined with each dose of the salicylate which is best given in some aromatic water to conceal its somewhat acrid taste. It is important to keep up the action of the drug for some days after the disappearance of the fever, as the premature disuse of it is apt to lead to a return of all the symptoms—a so-called relapse.

Towards the close of a case of rheumatic fever, the joints are not unfrequently left rather swollen and painful: it is then that iodide of potassium (internally), and iodine paint (externally) are so useful. When quite convalescent,

the patient should have tonics, and especially steel and quinine; and if rheumatic pains linger, the salicylate of quinine, in five-grain doses, three times a day, is often of much service.

Other salts of salicylic acid will probably be found useful in the treatment of rheumatism; and lately a new preparation, "salol" has been introduced. It is a salicylate of phenol, and has been used a good deal in America, with, I believe, satisfactory results.

But it may be asked, what is to be done in those cases of articular rheumatism in which the salicylates are not successful? Well, it is unfortunate when this happens, but we may fall back upon large doses of salicin, upon alkalies, or upon the excellent alkaline quinine prescription of Sir Alfred Garrod. Quinine and bicarbonate of potash are rubbed up together with a little mucilage and some aromatic tincture, in such proportions that each ounce and a half of the mixture contains five grains of quinine (in the form of carbonate) and thirty grains of potash. This dose may be given every four hours for as long as may seem desirable.

Of course, all cases of rheumatic fever must be kept in bed, and properly dieted. The most suitable nourishment in the earlier stages is the usual beef-tea and milk "fever" diet, but to this may soon be added some farinaceous food, eggs, and afterwards fish. Rheumatic fever is a disease of debility, and it is very desirable to keep up the strength of the patient; but in some cases the too early resumption of meat has seemed to be followed by a return of the rheumatism. Further information on this point would be of value. Stimulants are not absolutely necessary, nor often needed, in cases of articular rheumatism; but they may be required at times, and should be administered in accordance

with the condition of the patient. The bowels should receive attention but no active purging is required, especially as movements necessitated by any action of the bowels are attended with considerable pain in severe cases.

On the other hand, opium or morphia which may well be used hypodermically, is often of great service, alleviating the pain in the joints and allowing the patient to get some sleep. When cardiac mischief arises in a case of acute rheumatism, it should be treated in accordance with the plan adopted in such cases, the consideration of which is outside my subject.

I must, however, say something about the treatment of hyperpyrexia, a matter of much interest and importance. It is unfortunate that in this severe condition, where most we want its aid, the salicylate of soda, though it was originally introduced as an antipyretic, should entirely fail.

Nor can I say much that is favorable of any other of the reputed febrifuges, such as quinine, antipyrin, etc. In truth, we are driven, in the treatment of hyperpyrexia, to the application of external cold, and although some years ago I expressed a very doubtful opinion as to the efficacy of this method, a further knowledge of the subject has led to a considerable modification of my original views. There is now, I think, no question that the careful and judicious use of the cold bath or cold pack holds out the best chance of saving life in these truly formidable cases. The most important precaution would seem to be that the application of cold should be gradually and cautiously applied so as to avoid shock. This may be accomplished by placing the patient at first in a bath the temperature of which is not much below 80° F., and gradually reducing the temperature until the desired

effect is produced. This bath may have to be repeated more than once perhaps, and the use at the same time of injections of ice-cold water into the rectum may be of service.

Where a bath is not available, or thought to be undesirable for any reason, the cold pack may be tried. In cases where ice is not used, the patient's body and limbs are wrapped closely in a single sheet, which has been previously wrung out of cold water (temperature 50° to 60°). A blanket is then thrown loosely around him, and he is allowed to remain undisturbed for about half an hour, when the same process is gone through again, and repeated until the temperature is sufficiently reduced. When the ice pack is employed, a hip bath, or other suitable receptacle, containing a few gallons of water, in which some large pieces of ice are floating, is kept by the patient's bedside, and his body and each limb are separately wrapped in pieces of old sheeting which have been wrung out of the iced water, each piece being renewed as often as it begins to feel warm to the hand. No other covering of any kind is put over the patient.

In this way the temperature may be very rapidly reduced, and it is necessary to be careful that it is not brought too low. It should not fall below 99° F.

Strychnine as an Antidote in Narcotic Poisoning.

It is universally recognized that narcotic drugs in lethal doses produce death through paralysis of the respiratory centre, and it appears difficult to account for the fact that strychnine, the most powerful stimulant to that centre which we possess, should not be recommended as part of the routine treatment for all narcotic poisons. Atropine for the present is allowed to hold this position, but there is a stage in opium

poisoning at which the use of this drug is fraught with danger, and a patient may pass away in a condition of profound narcosis in which the action of atropine preponderates over that of the original poison.

Strychnine has long been used as an antagonist to chloral in cases of poisoning by that drug, and the similarity in many respects between the effects of chloral and of opium led Dr. G. A. Gibson to employ strychnine in order to counteract profound opium narcosis.

In a number of cases of narcotic poisoning which came under Dr. Gibson's care, strychnine was used hypodermically when there had been any irregularity or interruption of the breathing, and the effect of this drug was immediately shown by the increased rate, more regular rhythm, and greater depth of the respirations; while even in cases where the breathing had ceased, Dr. Gibson states, it has again commenced after the administration of the strychnine.

Dr. Gibson takes exception to the general treatment of narcotic poisoning given in the ordinary books, and contributes the following as the best method of treatment in such cases.

The chief indications in all such cases are two in number: first, to remove any of the poison that may be within reach; and, second, to sustain the activity of the vital centres, especially that concerned in the maintenance of the respiration, until the poison which has been absorbed is eliminated.

The first indication can most perfectly be met by washing out the stomach by means of the siphon tube, which is at once more convenient and more thorough than the stomach pump. If neither siphon nor stomach pump should happen to be at hand, a tablespoonful of mustard in half a pint of

tepid water, or 20 grains of zinc sulphate in a similar quantity of water, may be administered. In suicidal cases, however, the exhibition of such remedies is as a rule well nigh impossible, and for these, as well as many other cases, the hypodermic injection of $\frac{1}{10}$ of a grain of hydrochlorate of apomorphine, which may always be kept ready in the form of tabloids, is necessary. By one or other of these methods the last trace of the drug may be removed from the stomach. If the siphon or stomach pump has been employed, a pint of strong black coffee should be introduced before it is withdrawn, or, if neither can be used, it may be given by the rectum.

The next indication is to keep the vital centres in a state of activity, while at the same time doing nothing that can in any way cause exhaustion of any part of the system. Here we have at our command several means of rousing the centres, which may be used in turn according to circumstances. It is well as a rule to keep the patient awake by asking questions or issuing commands in a loud voice. If this is not enough, the same end may be attained by tapping the forehead with the tips of the fingers, pinching the arms and legs, or pricking the skin slightly with a needle. If these are not sufficient to prevent the appearance of sleep, the cold douche may be used; but in Dr. Gibson's opinion the employment of cold is as far as possible to be avoided. A far more efficient mode of rousing the patient is to be found in the application of mustard leaves to the calves, and in the use of the interrupted or induced current, as by such means powerful stimuli may be administered without the possibility of aiding the depressing effects of the poison.

One method of keeping the patient

awake must emphatically be condemned—namely, that of making him walk about, as is still to be found recommended in some of the text books. This method used to be in vogue at some of the hospitals, and was carried out by means of relays of policemen specially told off for the duty. The patient was marched round the waiting room between two of them, and was followed by the resident physician or clerk in charge of the case, whose rôle was to flick the calves with a wet towel, if there be any signs of flagging energy on the part of the patient. This mode of preventing the patient from sinking into slumber has a great tendency to exhaust the vital powers, and has almost every-where been rightly abandoned.

Another method commonly adopted in such cases must also be at least strongly denounced—namely, the administration of alcoholic stimulants. These aid the action of narcotics, and must be studiously avoided.

Keeping the patient in the horizontal position, the respiration is to be carefully watched, and if there should be the least sign of irregularity, or shallowness, or inequality in the breathing, $\frac{1}{100}$ or $\frac{1}{50}$ of a grain, according to the age of the patient, of sulphate of strychnine should be administered subcutaneously, and may be repeated at intervals of an hour two or three times. If, in spite of the strychnine, the respiration becomes very feeble or ceases entirely, artificial respiration must be commenced promptly. The most convenient method to employ is that of Sylvester; and it should be persisted in until, on the one hand, the respiration is carried on by natural means, or, on the other, the heart has for half an hour ceased to beat. If any one who reads these remarks should employ strychnine in the manner above described, he will

be struck by the immediate improvement in the respiration which follows its administration.

If the circulation threatens to fail in consequence of the poison affecting the motor mechanism, or of spasm of the arterioles caused by deficient oxygenation of the blood, it also will require prompt attention. The use of the strychnine is of service as a stimulant to the motor centres of the heart, and may be aided by the employment of ammonia or ether; while if artificial respiration has been thoroughly performed there should be no spasm of the arterioles; but in the event of such an occurrence recourse must be had to nitrite of amyl.

Although special reference has been made in these remarks to narcotic poisoning, it must be added, in conclusion, that in cases of danger from failure of the respiratory centre, caused by the general anæsthetics, the employment of strychnine is likewise of the greatest importance.—*Therapeutic Gazette.*

DISEASES OF THE NERVOUS SYSTEM.

Secondary Dementia—Viewed from the Clinical, Hereditary and Evolutionary Points.

DR. CLOUSTON (*British Medical Journal*) concludes an able discussion thus :

1. Normal brain cortex differs enormously in different individuals in its inherent qualities and potentialities, these differences being in the most important points necessarily "functional."

2. The strongest common clinical and psychological tendency of every form of mental disease is the tendency to end in dementia.

3. Dementia being a virtual death of the higher mental powers, all insanities, therefore, mean mind death and social death.

4. Dements constitute two-thirds of our insane population.

5. Forty out of every hundred of all cases of insanity soon pass into secondary dementia pure and simple, or mixed up with maniacal or delusional conditions.

6. The functional change that takes place in the brain cortex in secondary dementia is primarily and chiefly confined to the mind tissues, and is, in fact, a unique disease in nature with no pathological analogies whatever.

7. The problem of what secondary dementia means and how it can be averted is the cardinal problem of psychiatry.

8. Mental disease may be defined as a "tendency to dementia."

9. The constant association with dements alone tends to lower the mental tone of the staffs of asylums by the well known law of the action of mind on mind.

10. Secondary dementia has as yet no sufficient pathological explanation.

11. It may be looked on as a reversion of type, as a failure of nature's power to complete her most organized and highest product, as a premature functional death of the mind tissue, or as a most beneficial result of the laws that bring a bad stock to an end.

12. Real secondary dementia may be so closely imitated by secondary stupor that only time and the effects of treatment can distinguish them. We may look on the primary maniacal attack as threatened dementia, and the secondary stupor as bring a further stage towards it.

13. We have no reason to think that a brain which has a perfectly sound heredity can by any series of bad conditions known to us be made to exhibit typical secondary dementia.

14. The impressions through the senses from the outer world do not

stimulate normally the cortex of a dement, though if the stimulant is very strong a certain response is obtained, but such a brain is incapable of providing such a stimulus by its own inherent working.

15. Dementia cannot be looked on as caused by the damage done to the mind tissue through the primary acute disturbance, for it often occurs without an acute primary stage, and its occurrence bears no definite relationship to the intensity or the duration of the primary attacks.

16. Most of the cases of chronic and delusional mania have also dementia superadded.

17. The pathological appearances, naked eye and microscopic, found in the brain cortex in long continued cases of dementia, are capable of explanation on the theory of the degeneration and atrophy of long disused tissue; or they may be the advanced stage of the pathological condition, which is the real dementia, but which in its early stage we cannot as yet recognize.

18. No merely vascular theory of dementia is tenable.

19. Typical secondary dementia is always hereditary, and its genesis can be traced through the stages of hyperactivity, hyperæsthesia, diminished inhibition, instability, melancholia, mania, and alternation in different generations, or in members of the same generation affected in different degrees.

20. Pure and uncomplicated secondary dementia does not readily supervene on the insanities that occur after full development of and before the period of decadence, such as puerperal and lactational insanities, or those resulting from overwork or emotional causes at that age.

21. Melancholic and alternating insanities, delusional and inhibitory

insanities, are not the preliminary stages of secondary dementia nearly so frequently as maniacal attacks.

22. Almost all pure cases of secondary dementia will be found to have originated in the developmental (pubescent and adolescent) insanities.

23. Masturbation may be an element in the production of secondary dementia in some cases, but is not a necessary or a constant cause.

24. Idiocy and congenital imbecility represent Nature's failures during brain growth, while secondary dementia is the typical failure during brain development.

25. Pure secondary dementia means that the organism has failed in its most highly organized structure and its most important function just at the point before full reproductive perfection should have naturally been reached.

26. Undue and unphysiological means through a forcing-house mode of education during adolescence, without regard to the hereditary capacity and weakness of the organism tend towards dementia.

27. The constant changes in each generation of modern civilized life, in the adaptation of the human organism to its environments, and the special efforts thus rendered necessary by the struggle for existence, tend towards dementia, through the strain they put on the most delicate of all organized tissues.

28. Adolescent insanity ending in secondary dementia may be regarded as the typical form of mental disease.

29. Dementia would have seemed a more natural sequence of the insanities of decadence (climacteric and senile) than of any others, for in them it would be a mere anticipation of the reproductive and mental death that has physiologically begun.

30. The lower animals, while subject

to attacks analogous to melancholia and mania, are not subject to any state corresponding to secondary dementia before the senile period.

31. By prophylaxis in some cases, and by right treatment of the primary attack in others, dementia may be averted, but in many cases it is inevitable through the bad heredity of the individual.—*American Lancet*.

Butyl-Chloral in Trigeminal Neuralgia.

THERE are only a few remedies which exercise their action upon one nerve alone. According to Liebreich (*Therapeutische Monatshefte*), butyl-chloral is one of these; in doses of from 15 to 45 grains it produces anæsthesia of the trigeminal nerve. Liebreich has convinced himself of this in tic douloureux. Unfortunately it is not lasting in its effect, and large doses produce sleep. It is very serviceable, however, in neuralgia of the trigeminus in which the pain is not chronic. Rheumatic face ache, pains occasioned by injury, toothache, either from an inflammation of the pulp or from periostitis, may be obviated by the use of butyl-chloral. He has used butyl-chloral with much satisfaction also in cases in which at the beginning the filling of a tooth has exerted painful pressure.

The drug is disagreeable in taste and difficultly soluble. The following prescription for its use is suggested :

Butyl-chloral, gr. xxx-lxxv; spiritus vini rectificat, ℥cl; glycerini, f 3 v; aquæ destil, f 3 iii 3 vi. M. Sig. Take three or four tablespoonfuls at once.

The size of the doses is to be regulated by the intensity of the pain and by the condition of each individual patient.—*Medical and Surgical Reporter*.

Hemiplegia.

DR. J. H. JACKSON in a recent lecture upon diseases of the brain, adds some

original and thoughtful facts to our knowledge of this subject. He speaks of two types of hemiplegia, an arm-type and a leg-type, where either of these extremities is most disabled. In a left hemiplegia the arm-type would be preferable, because the left arm can, if necessary, be dispensed with; while in a right hemiplegia the leg-type would be preferable, since a man can better afford to lose a right leg than a right arm, and there is less likelihood of defect of speech if the leg-centre is chiefly affected.

If the paralysis begins very locally, say in the hand, and increases in degree and range very slowly, day by day and week by week, there is great probability of tumor of the opposite cerebral hemisphere. In most cases of slow hemiplegia one should treat for syphilis in the early stages. A hemiplegia following immediately upon an epileptic seizure beginning very locally, would indicate cortical disease in the Rolandic region. The discharging lesion causing epileptic seizures in such cases is usually probably a local encephalitis about a tumor.

The treatment of syphilitic post-epileptic hemiplegia is treatment for syphilis, of course, and also empirical treatment with bromides, the hemi or mono-plegia itself requiring no treatment.

If hemiplegia comes on deliberately, say in half an hour, without defect of consciousness, the presumption is for local softening from plugging of the middle cerebral artery or one of its branches. If rapid with loss of consciousness, or if coma soon follows a deliberate onset, the presumption is for cerebral hemorrhage. But these rules are only empirical and have their exceptions.

The type of syphilitic hemiplegia due to a syphilitic endarteritis is not cured by drugs. After the artery is obliterated

and softening occurs, drugs will do nothing toward curing the paralysis. But active treatment should nevertheless be carried on with mercurials and iodides in order to prevent similar occlusion of other vessels. There is no doubt that some of these cases of hemiplegia do recover, but not from treatment. All cases of hemiplegia, from whatever cause, that get well do so through the law of compensation by other nervous elements. This compensation will depend materially upon the smallness and position of the lesion.

As regards treatment in all classes of hemiplegia, the paralysis needs none. Massage and gentle faradization will be of some service while we are waiting for compensation, but merely as an artificial exercise. To diminish the quantity of highly nitrogenized food, to look after digestion, to keep the patient's bowels free, is the best style of treatment. If arterial tension be high give small doses of mercury and saline aperients. Never give strychnine in cerebral paralysis.

Hemiplegia is not a nervous disease at all in the strict sense; it is in most cases an arterial affair.—*British Med. Journal*.—*Analectic*.

DIGESTIVE TRACT.

Gastric Cough and its Treatment.

BULL (*Deutsche Archiv für Klin. Med.*) asks if, as is now supposed, cough may have its origin in such diverse parts as the nose, larynx, bronchi, pleura, œsophagus, intestine, liver, spleen, the uterus and its appendages, why may not the stomach also occasionally be the seat of the afferent impulse. In reviewing the literature, he finds all authors agree as to the possibility of the gastric origin of cough, but regard it of great rarity. Bull recently encountered such a case in a young,

anæmic woman, affected with a violent, dry cough excited by pressure over the epigastrium. There were no signs of pulmonary disease. Hæmatemesis and other indications of gastric ulcer had preceded the appearance of the cough. He considers it not unlikely that the cicatrices of the ulcer were the source of the reflex irritation. Chloral and morphine were used unsuccessfully in the treatment of the cough. Subsequently treatment directed to the stomach cured it. Cataplasms were applied, and internally gr. xlv of bismuth were administered four times daily in 3 xxv of luke warm water. The cough lessened after the first dose and then gradually disappeared. A recurrence cured by the same means.—*Polyclinic*.

Oatmeal.

BARTHOLOW says: Oatmeal is very indigestible, and frequently gives rise to gastro-intestinal catarrh and constipation.—*Coll. and Clin. Record*.

Indigestion and Flatulence.

R̄. Pulv. carbo., lig., 3i; pepsin pulv., grs. xxxvi; pulv. capsici, grs. iv; pulv. ipecac., grs. iii. M. ft. pulv. no. xii. Sig. One to be taken after eating in a flour wafer.

The Milk-Curdling Ferment of the Stomach.

DR. E. G. JOHNSON has studied the action of the milk-curdling ferment of the stomach in the clinic of Professor Riegel, of Giessen, and subsequently in the Sabbatsberg Hospital, Stockholm.

Researches were made in twenty-four cases on the presence of the ferment and the pathological conditions relative to it. Fourteen of these patients suffered from hyperacidity, accompanied in four of them by moderate dilatation of the stomach. In one

of these latter there was also hypersecretion of the gastric juice. One case had considerable dilatation of the stomach, with hyperacidity and marked hypersecretion. In three cases the dilatation was insignificant, but there was hyperacidity, complicated in one case by slight, and in another by very great, hypersecretion; in the third case the hyperacidity was accompanied by chlorosis. Three other patients suffering from hyperacidity were also the subjects of gastric ulcer, Dr. Johnson also examined four cases of hyperacidity with neither dilatation nor hypersecretion, of whom three were chlorotic; a case of catarrhal jaundice, four cases of severe chronic dyspepsia, and five cases of carcinoma of the stomach. The contents of the stomach were removed while the patient was fasting, and also four or five hours after food had been given for the purpose of the observations. Dr. Johnson sums up his researches as follows:

1. The milk-curdling ferment is a constant product of the glandular secretion of the stomach, and it is met with at all periods of digestion, except in cases of cancer of the stomach, in which it is never found.

2. The ferment was also found in the hypersecretions of the gastric juice of a fasting patient after his stomach had been washed out the previous evening.

3. Gastric juice, which contains hydrochloric acid, and which when neutralized causes coagulation of milk, does not appear to be affected in its action by the greater or less amount of acid contained in it at first.

4. The milk-curdling ferment does not pass into the urine.

5. The ferment is easily destroyed by an excess of alkali, and it is probably on this account that it does not pass into the fæces under normal conditions.

6. During fever the ferment appears to be absent from the stomach.

7. The ferment causes coagulation more slowly in boiled than in fresh milk.

8. During the coagulation of milk by the ferment the reaction remains neutral, and lactic acid is not met with after coagulation.—*Lancet*.—*Therapeutic Gazette*.

The Chemical Testing of the Gastric Juice.

MUCH has been said of the impropriety of the promiscuous administration of pepsin in digestive disturbances without knowledge of the condition of the gastric juice, and it is therefore of much interest to learn that it is now possible to chemically test the gastric juice. This will naturally facilitate the exact and scientific administration of its digestive ferment, pepsin.

Le Progrès Médical, in a recent article, shows that great advances are being made in applying to medicine the knowledge furnished by organic chemistry.

It seems that during a few years past a number of reactions of the stomach acids with certain organic materials have been discovered. These reactions are found to be of great service for diagnostic purposes. By means of comparatively simple methods an accurate qualitative analysis of the gastric juice may be made.

For the detection of hydrochloric acid are used the two reagents, tropeoline and phloroglucine-vanilline. A solution of tropeoline is normally yellow, but is altered by hydrochloric acid to a brown color.

Phloroglucine-vanilline consists of a mixture of two parts of phloroglucine and one of vanilline dissolved in thirty parts of absolute alcohol. Thus prepared, the reagent has a reddish

yellow tint. Addition of hydrochloric acid, or of any mineral acid, changes the solution to a brilliant red.

An easy method of estimating hydrochloric acid quantitatively, and which is accurate for diagnosis, is found in the use of an aniline derivative, *vert brillant*. Its aqueous solution is bluish green. In the presence of a one-tenth per cent. solution of hydrochloric acid it becomes green; with a fifteen-hundredths to a two-tenths per cent. solution, yellow; with a four-tenths per cent. solution, or stronger, it assumes a "dead leaf" color.

For finding lactic acid are used methyl violet, ferric sulphocyanide, and the so called reagent of Uffelmann. An aqueous solution of methyl violet changes from a pale to a rich blue in the presence of lactic acid.

Ferric sulphocyanide is decolorized by lactic acid.

The reagent of Uffelmann is prepared by adding a few drops of ferric chloride to a solution of carbolic acid. The resulting fluid, which is violet, becomes yellow with lactic acid, and is decolorized by hydrochloric acid.

To detect peptones the liquid under examination is made alkaline with potassium or sodium hydrate; a salt of copper is then added, and according to the amount of peptone present, a lilac, violet or rose color is obtained.

Pepsin is demonstrated by artificial digestion.

Propeptone also yields a precipitate on the addition of acetic acid and ferrocyanide of potassium.

In employing the reagents above mentioned, first of all, a sample of the patient's gastric juice must be obtained. Some withdraw it undiluted, others give water a short time previously, and others still prefer to have some simple kind of food taken, allowing the

stomach to act on it a while before removing the contents.

It is found that lactic acid disappears from the stomach after digestion has proceeded from a quarter to a half an hour. Hence the diagnosis is founded chiefly upon the presence and amount of hydrochloric acid, and this feature is even made a basis for classification.

Digestive disturbances of the stomach are: those characterized by a deficiency, by a normal amount, or by an excess of hydrochloric acid.

Hydrochloric acid is found to be deficient in cancer of the stomach, and in dyspepsia depending on catarrhal and atrophic conditions.

The amount of hydrochloric acid is normal in nervous dyspepsias, or where some intestinal trouble simulates gastric disease.

Excessive secretion of hydrochloric acid constitutes a form of dyspepsia only recognized recently. It is usually associated with atony of the stomach.

It is easy to see how great may be the value of the reagents named in making a correct diagnosis between these various difficulties and in deciding upon a rational method of treatment.—*Druggists' Bulletin*.

DISEASES OF RESPIRATORY ORGANS.

Acoustics Applied to the Human Chest in Physical Diagnosis.

DR. J. R. LEAMING read a paper before the New York Academy of Medicine, entitled: Acoustics Applied to the Human Chest in Physical Diagnosis, in which he said that it was not until the laws of light were studied in relation to the eye that ophthalmology became a true science. There is a law of acoustics which, when applied to the air chamber of the chest, will place the

diagnosis of diseases of the organs within on a scientific basis. This practical age of the application of the laws of sound to the telegraph, phonograph, etc., makes it easy to apply acoustic law to the chest in diagnosis. Dr. Leaming considered the different facts involved in this subject, beginning with a brief statement of the laws governing sound, the most important of which, in this connection, are that sound consists of vibrations of the air; a greater number than seventeen hundred vibrations a second is not appreciated by the human ear; and fewer than thirty-two a second give the impression of distinct sounds. He described the chest as a chamber whose walls are lined with a dense elastic smooth membrane, and closed at the base by the diaphragm. It is a perfect acoustic chamber which can be enlarged or contracted, and its power increased or diminished with the speed of thought. While a most perfect instrument for the formation and reflection of sound waves, it is liable to alteration by disease and its acoustic qualities to change. It also contains the lungs, tubes, and heart, which interfere with its acoustic qualities. The heart and lungs accomplish their work with sound, and to these the auscultator must attribute due importance. The arrangement of the tubes and sacs in the lungs also constitutes an acoustic instrument, but of a different kind from that of the chest chamber. Each sac is a resonator distended with air constantly rarefied by heat, and upon this air the sac constantly contracts, causing vibrations which help to make up the vibrations of the respiratory murmur. Sound waves also pass in from the open air and are consonated in each sac, as are also the friction vibrations of the tidal air rushing in and out through the open bronchi.

Speaking of acoustic laws as applied to the heart, the author said he had become further convinced of the correctness of the view expressed by him twenty years ago regarding the origin of the first sound of the heart. It is formed by the vibrations of the tense mitral valve, by the tense chordæ, the sound of muscular contraction, and the friction of the blood.

Regarding stethoscopes, he said there is none better than Camman's binaural instrument; but for accuracy and delicacy, and least likelihood of getting out of order, nothing equals the application of the temporal bone of the head to the resonant body; the most sensitive point of this bone is in front of, and just above, the external ear.

The paper was discussed by Dr. A. L. Loomis, who thought it could not be more finished as it related to the principles of acoustics in diagnosis of diseases of the chest; but it had brought the subject down to the practical application of those principles and left it there to be carried farther by each hearer. Dr. Loomis regards four qualities of sound as of every day use to the diagnostician—pitch, quality, duration, and rhythm. He fully agrees with Dr. Leaming regarding the importance of cardiac rhythm, slight alterations of which being often of greater significance than murmurs without change in rhythm. He has never been able to separate what Dr. Leaming had referred to as the consonant resonance of the sacs from the other elements of the respiratory murmur.—*Med. and Surg. Reporter.*

Cough Mixtures.

R. ACID, hydrocyanic. dil., ℥ iij; spts. chloroformi, ℥ x; acid. hydrobromic (34 per cent.), ℥ xv; syr. scillæ, ℥ xx; syr. toluani, fl. dr. ss; aquæ, q. s. ad. fl. dr. ij. M. Sig. One dose for

adult; to be repeated every three or four hours.

℞. Syr. tolutani, syr. pruni virginianæ, tinct. hoyscyami, spir. ætheris com., aq, āā part. æqual. Mix. Dose. A teaspoonful.—DR. E. G. JANEWAY.

℞. Ammonii chloridi, dr. 1; spir. ætheris comp., fl. dr. 6; syr. pruni virginianæ, fl. oz. 2; aquæ, q. s. ad. fl. oz. 4. Dissolve and mix. Dose. A teaspoonful.

℞. Acidi hydrocyanici diluti, chloroformi purificati, āā ʒ 30; tinct. hyoscyami, fl. oz. 1; aquæ camphoræ, q. s. ad. fl. oz. 2. Mix. Dose.—A teaspoonful.

Bronchitis.

℞. TINCTURE veratri viridis, ʒ xv; syrupi ipecacuanhæ, spiritu ætheris nitrosi, āā fl. oz. ss. M. Sig.—Fifteen drops every three hours. For a child one to two years old.—B. F. SCHNECK.

Another :

℞. Pulveris ipecacuanhæ, gr. vj; pulvires myrrhæ, gr. xij; potassii nitratis. dr. ss. Misce et divide in partes vj. Sig.—One every fourth hour. For elderly persons.—PARIS.

Another :

℞. Acidi hydrocyanici diluti, gtt. j; tincturæ lobeliæ, fl. dr. j. M. Sig.—One dose. Complicated with asthmatic symptoms.—LIVEZY.

Gargle for Subacute Pharyngitis.

℞. FERRI et ammonii sulph. (U.S.P.), potassii chloratis, āā dr. i; aquæ, fl. oz. 16. Dissolve. Use as a gargle, morning and evening.—DR. W. F. MITTENDORFF.

On the Treatment of Hiccough.

In the *Allgemeine Medizinisch Central-Zeitung*, Dr. Pensky asserts (on the ground of his experience of about 20 years' duration) that hiccough can be infallibly and momentarily arrested by the following procedure: The patient should stand erect with his arms abducted from the body up to a horizontal

level. The doctor (or any body) places himself face to face with the patient and compresses his radial arteries, while a third person makes the patient swallow slowly, but steadily (without any interruption) a tumblerful of water. Referring to Dr. Pensky's method, Mr. G. Güshtchin draws attention to the fact that hiccough, however severe or obstinate, can be swiftly stopped by a much less troublesome and fussy procedure, and one practised by the Russian peasantry from time immemorial. It consists in making rapid and deep inspirations, alternating with very slow and deep expirations. The author employs this simple means with uniform success in all cases he meets.—*St. Louis Medical and Surgical Journal*.

Vocal Music and Prevention of Phthisis.

At a meeting of the Medical Society of Virginia, Dr. C. E. BUSEY, of Lynchburg, Va., read a paper on the cultivation of vocal music in schools as one of the means of preventing phthisis. He states it as a well known fact that those nations which are given to the cultivation of vocal music are strong vigorous races, with broad expansive chests. If an hour a day in public schools were devoted to the development of vocal music, there would not be the sad spectacle of the drooping, withered, hollow chested, round shouldered children which confronts us now. There is too great a tendency to sacrifice physical health upon the altar of learning. Vocal music is gymnastic exercise of the lungs, producing increased expansion of the lung tissue itself. The lungs in improved breeds of cattle, which naturally take little exercise and are domiciled much of the time, are considerably reduced in size, when compared with those animals running at liberty; and so it is with the

human beings who lead inactive lives. Phthisis generally begins at the apices of the lungs because these parts are more inactive, and because the bronchial tubes are so arranged that they carry the inspired air with greater facility to the bases than to the apices. During inactivity a person will ordinarily breathe about 480 cubic inches of air per minute. If he will walk at the rate of six (*sic*) miles an hour, he will breathe 3,260 cubic inches. In singing, this increases more than in walking, as singing well requires all of the capacity of the lungs. The instructor of vocal music, in addition to his musical education, should understand the anatomy and physiology of the respiratory organs.—*Virginia Medical Monthly*.

Myrtol as a Disinfectant of the Air-Passages.

THE problem how to disinfect the air-passages is not yet solved. Skoda's turpentine inhalations are not always tolerated, and require a long use. Masks and similar apparatus (Curschmann and others) are also much objected to by patients. Professor Eichhorst is of opinion that myrtol will leave all other disinfectants in the background in security and quickness of action. Myrtol is represented by that part of myrtol oil which comes over between 160° and 170°. It is a clear fluid of aromatic and penetrating smell, which can be conveniently administered in gelatin capsules. French authors have recommended it in bronchial catarrh, and scattered observations have been made on its disinfecting properties. But a methodical use of this substance has not been made, and it is not mentioned in various recent works on therapeutics. After only one gelatine capsule, the breath smells of myrtol within an hour, and the effect lasts from twenty-four to forty-eight hours; but, in order to sub-

due putrid processes, two capsules (each containing .15 gramme) were usually given every two hours. The appetite improves under its use, and the expectoration and breath lose all offensive odor with remarkable quickness. Four cases are mentioned by Professor Eichhorst as showing the beneficial action of myrtol in a striking degree, but one of the cases showed that it possesses no specific action against the tubercle-bacillus. The expectoration diminishes under its use; the appetite as before remarked, improves, and the patients feel better generally.—*London Medical Recorder*.—*Therapeutic Gazette*.

External Application of Chloral Hydrate in Night-sweats.

DR. NICOLAI (*Gazette Médicale*) has obtained very favorable results from the use of chloral hydrate in the night sweats of phthisis. Every night before retiring the entire body of the patient was sponged with the following: R. Chloral hydrate 3 ij; alcohol, water, āā 3 iij.—M.

Should this not suffice, the patient's night dress is saturated with this solution, then allowed to dry, and worn.

This mode of treatment also gave excellent results in the night sweats of children the result of phthisis. Two or three of these sponges will generally suffice to check the sweating which has persisted for two or three weeks.—*Bull. Therapeutique*.—*Medical News*.

Winter Cough.

This may be promptly cured by prescribing the following :

R. Terebene pur. 3 drams; ol. eucalypt. globul. 2 drams; syr. tolu, 2 ounces; listerine, 2 ounces. M. Sig. A tablespoonful every two or three hours. Shake the bottle well before using.—*Medical World*.

BOOK NOTICES.

A TREATISE ON HEADACHE AND NEURALGIA, including Spinal Irritation and a Disquisition on Normal and Morbid Sleep; by J. Leonard Corning, M. A., M. D., Fellow American Academy of Medicine, Member of the New York Neurological Society, etc., etc. E. B. Treat, 771 Broadway, N. Y. City, publisher. Price \$2.75.

The excellence of the Medical Classics is certainly continued in this volume by Dr. Corning, on a subject which at present is engrossing the minds of so many physicians, who are laboriously struggling to secure remedies for the pains and aches to which human flesh is heir. This volume opens with a discussion of *headache* proper, or pains which owe their origin to *intra cranial* causes. This portion, which is comprised in Part One, is well worth the price of the entire volume. Dr. Corning has not confined himself to the treatment of these nervous phenomena by drugs simply, but has also given a full and complete resumé of the mechanical means of cure and the regimen to be adopted for the prevention of the various varieties of nervous disease, including all that is known of the value of electricity and the different methods of its application in the treatment of pain. In the Second Part *neuralgia*, or pains which owe their origin to *extra cranial* causes, is discussed.

Part Third is historical. Part Fourth treats of irritative conditions of the spine, and the volume concludes with a highly interesting essay on normal and morbid sleep, in which the author cites many illustrative cases. The subjects treated, and the value of a thorough acquaintance with this branch of medicine commends this book, we are sure, to our readers, and all we need add, is, that the work is well written, abounds in illustrations, and the ground is well covered by an author who is a recognized authority on questions relating to the nervous system.

NERVOUS EXHAUSTION; ITS HYGIENE, SYMPTOMS AND TREATMENT; by George M. Beard, A. M., M. D., formerly Lecturer of Nervous Diseases in the University of New York. 2nd edition, revised and enlarged by A. D. Rockwell, A. M., M. D., Professor of Electro-Therapeutics in the New York Post-Graduate School and Hospital. E. B. Treat, publisher, 771 Broadway, N. Y. City.

Sometime ago we had occasion to call attention to the first edition of this work by Dr. Beard. In that notice we took the ground that though there was much to commend in this book, still, after a careful perusal of its contents, we were forced to the conclusion that there was much in its make up which

was speculative, and not conducive to the best interests of medicine, viewed from whatsoever standpoint. After a careful review of this revised edition, we still continue of the same opinion, and believe it will work more harm than good to the average reader.

FAVORITE PRESCRIPTIONS OF DISTINGUISHED PRACTITIONERS, with Notes on Treatment; by B. W. Palmer, A. M., M. D. E. B. Treat, publisher, 771 Broadway, New York City. Price \$2.75.

Many volumes of this kind have been published, but none have come from the pen of so able an author and writer as Prof. Palmer, whose name alone is sufficient guarantee as to the value and accuracy of the contents of this book. We commend it as a book which will be valuable for ready reference, and one which will give the practitioner an insight into the combination of drugs as used by our most eminent medical teachers.

MESSRS. J. B. LIPPINCOTT COMPANY, of Philadelphia, Pa., announce to the profession the publication of a CYCLOPEDIA OF THE DISEASES OF CHILDREN, medical and surgical, by American, British, and Canadian authors, edited by John M. Keating, M. D., in four imperial octavo volumes; to be sold by subscription only. The first volume will be issued early in April, and the subsequent volumes at short intervals.

A thorough knowledge of the diseases of children is a matter of the greatest importance to most physicians, and as this is the only work of the kind that has been published in English, it will be invaluable as a text book and work of reference for the busy practitioner.

The American Biographical Publishing Co. will soon issue a work on AMERICAN RESORTS, with NOTES UPON THEIR CLIMATE, by Bushrod W. James, A. M., M. D., Member of the American Association for the Advancement of Science; The American Public Health Association; The Pennsylvania Historical Society; The Franklin Institute, and The Academy of Natural Sciences, Philadelphia; The Society of Alaskan Natural History and Ethnology, Sitka, Alaska, etc., etc., with a translation from the German by Mr. S. Kauffman, of those chapters of "die klimatische der Erde," written by Dr. A. Woeikoff, of St. Petersburg, Russia, that relate to North and South America and the islands and oceans contiguous thereto. Intended for invalids and seekers after health and longevity, as well as for those who desire to preserve good health in a suitable climate.



THE DENTIST'S SOFT TEMPERED STUB STEEL ROUND

NERVE BROACHES.

OLOF JOHANSON,

PATENTEE AND SOLE MANUFACTURER,

No. 1 MAIDEN LANE,

NEW YORK.

OLOF JOHANSON,

DENTISTS' NERVE BROACH,

Patent No. 251,598. Patented Dec. 27, 1881.

Postage paid to any part of the United States and Canada.

Since patenting these Broaches, I have improved them by making them cylindrical instead of conical, permitting of a more distinct barb at the point, also the permanent attachment to each Broach of a brass stem of convenient size and length for handling. Dentists who have examined these improved broaches, and are using them, say they are perfection and far superior to any broach made, being so finely tempered, they never break in the nerve canal as is so often the case with those usually made.

By recent improvements the Broaches are made in four sizes. For Sale by all Wholesale Dealers only.

Note following from some of the most prominent Dentists in the United States.

The undersigned Dentists, state that they are familiar with all the various kinds of Dental Broaches manufactured; that they are acquainted with and have used the Broach invented, patented, and manufactured by OLOF JOHANSON of New York City; and that they consider said Broach superior to any known to them, and use it in preference to all others.

Norman N. Kingsley, No. 25 West 27th Street, New York, in practice 29 years.		
E. S. Woodward, No. 361 Fifth Avenue,	"	20 "
George F. Schaffer, No. 44 West 34th Street,	"	17 "
John B. Rich, M. D., No. 12 East 22d Street,	"	43 "
William A. Dwinelle, M. D., No. 27 West 34th St.,	"	41 "
A. S. Northrope, No. 44 West 4th Street,	"	20 "
N. Malon Beekeirth, No. 125 West 42d Street,	"	42 "
E. Todd, No. 47 East 29th Street,	"	12 "
W. D. Tenison, No. 45 East 28th Street,	"	19 "
M. M. Maltby, D. D. S., No. 32 East 24th Street,	"	14 "
W. A. Bronson, M. D., No. 8 East 34th Street,	"	30 "
C. E. Francis, D. D. S., No. 33 West 44th Street,	"	21 "

Spiral Handle.—I can furnish these Broaches with my new Spiral Handle, thus giving a flexible and pliable Handle that can be bent to any shape and be of great use to the operator.

Send all orders to **OLOF JOHANSON,**
No. 1 Maiden Lane, NEW YORK CITY.

FELLOWS' HYPO-PHOS-PHITES

(SYR : HYPOPHOS : COMP : FELLOWS)

Contains *The Essential Elements* to the Animal Organization — Potash and Lime ;

The *Oxydizing Agents*— Iron and Manganese ;

The *Tonics*— Quinine and Strychnine ;

And the *Vitalizing Constituent*— Phosphorus,

Combined in the form of a syrup, with *slight alkaline reaction*.

It Differs in Effect from all Others, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

It has Sustained a High Reputation in America and England for efficiency in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs, and is employed also in various nervous and debilitating diseases with success.

Its Curative Properties are largely attributable to Stimulant, Tonic and Nutritive qualities, whereby the various organic functions are recruited.

In Cases where enervating constitutional treatment is applied, and tonic treatment is desirable, this preparation will be found to act with safety and satisfaction.

Its Action is Prompt: stimulating the appetite and the digestion, it promotes assimilation, and enters directly into the circulation with the food products.


The Prescribed Dose produces a feeling of buoyancy, removing depression or melancholy, and hence is of great value in the treatment of MENTAL AND NERVOUS AFFECTIONS.

From its exerting a double tonic effect and influencing a healthy flow of the secretions, its use is indicated in a wide range of diseases.

Each Bottle of Fellows' Hypophosphites contains 128 Doses.

Prepared by JAMES I. FELLOWS, Chemist,
48 Vesey Street, New York.

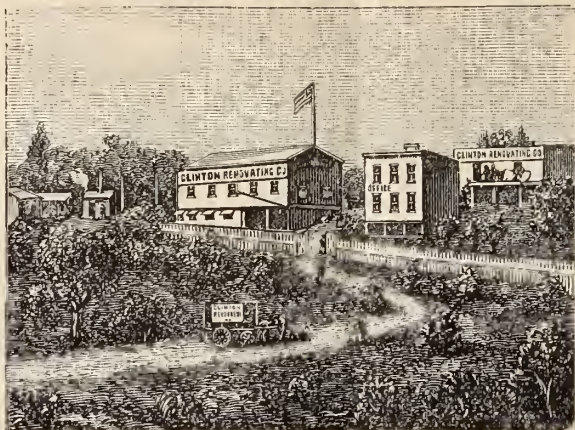
Circulars and Samples sent to Physicians on application.

 **SPECIAL TO PHYSICIANS**— One large bottle, containing 15 oz. (which usually sells for \$1.50) will be sent upon receipt of *Fifty Cents* with the application. This will be applied to the prepayment of Expressage, and will afford an opportunity for a thorough test in Chronic Cases of Debility and Nervousness. Express charges prepaid upon all samples.

FOR SALE BY ALL DRUGGISTS.

CLINTON RENOVATING COMPANY.

OFFICE :
359
 CLINTON ST.
 Cor. Degraw,
BROOKLYN,
N. Y.



THE
NAPHTHA
BATH

USED ONLY BY
 THIS
 COMPANY.

This Company calls the attention of the medical profession and the public to their system of Renovating and Disinfecting by the use of the

NAPHTHA BATH.

This process can be applied to all article of Furniture, Beds, Bedding and Mattresses, without either ripping or taking them apart. Every one who has tried this system pronounces it perfect, and the Company would like you to practically convince yourself of its merits.

Goods called for and delivered in Brooklyn, free of charge.

This Company refers to: Sheppard Knapp & Co., 13th Street and Sixth Avenue, New York.

J. R. Hegeman, Vice-Pres. Metropolitan Life Ins. Co., New York.

H. W. Maxwell, 70 First Place, Brooklyn.

Dr O. C. Gage, 26 West 31st Street, New York ; and many others.

DOCTORS, LOOK HERE!!

FIRE AND BURGLAR PROOF
SAFES
AT WHOLESALE.

WANTED!

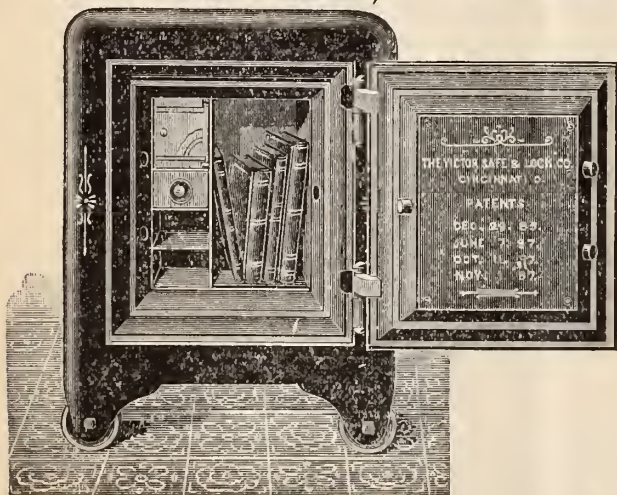
WANTED!

WANTED!

The names and addresses of all Lawyers, Doctors, Merchants, small dealers, Farmers, Housekeepers, and men of every calling

WHO HAVE NO SAFES.

We will furnish you with a first-class Safe, strictly fire-proof, burglar-proof combination lock, beautifully finished and lettered with name, at \$12 and upwards.



DEATH TO HIGH PRICES.

We pay no salaries or commissions to middlemen nor agents. We have no high salaried officers, but practice strictest economy to enable us to sell direct to the user at **LOWEST WHOLESALE PRICES.** The **Victor Safes and Locks** are the latest improved and are manufactured under excellent patents, issued Dec. 29th, 1885 ; June 7th, 1887 ; Oct 11th, 1887 ; and Nov. 1st, 1887.

Every Safe is guaranteed Satisfactory. Our prices are about 80 per cent. lower than any others. Write for our prices and terms at once. *Don't fail to mention the Digest.*

THE VICTOR SAFE & LOCK CO.,

118 West 7th Street,

CINCINNATI, OHIO.



VALENTINE LINN,

MANUFACTURER OF

FINE CARRIAGES,

47, 49, 51 & 53 BERGEN STREET, BROOKLYN, N. Y.

Telephone call 760.

*Broughams, Octagons, Coupes, Four and Six Seat Rockaways,
Victorias, Cabriolets, Extension and Canopy Top
Phaetons, and Surreys, Etc.*

PHYSICIANS' PHAETONS A SPECIALTY.

Below will be found the names of a few of the many physicians who have them now in use and will recommend them for their superior qualities. I make five different styles of them. Catalogues and Price Lists will be furnished on application.

Dr. Henry Armgardt, 317 Leonard St., Brooklyn, N. Y.

" E. S. Bunker, 117 St. Johns Place, " "

" John Byrne, 301 Clinton St., " "

" Wm. M. Butler, 507 Clinton Ave., " "

" C. M. Bellows, 442 Nostrand Ave., " "

" N. M. Carter, 499 Washington Ave., " "

" E. Eltinge, 2 Verona Place, " "

" George Fowler, 645 Marcy Ave., " "

" William Gillilan, Remsen & Henry St., " "

" E. Hilton, 204 South 8th St., " "

" H. J. Hesse, late Coroner, 163 Bushwick Ave., " "

" M. A. D. Jones, 163 Dekalb Ave., " "

" Chas. N. D. Jones, 163 Dekalb Ave., " "

" Chas. Jewett, 307 Gates Ave., " "

" Geo. C. Jeffery, 304 Jefferson Ave., " "

" J. C. Lester, 406 Clinton St., " "

" Nathan Matson, 415 Green Ave., " "

Dr. William Matson, 415 Green Ave., Brooklyn, N. Y.

" John A. McCorkle, 149 Clinton St., " "

" John Merritt, 22 Lafayette Ave., " "

" Wm. C. Murray, 436 Lewis Ave., " "

" C. H. Muncie, 363 Tompkins Ave., " "

" N. J. Preston, 98 Lafayette Ave., " "

" Frank W. Rockwell, 6 Lafayette Ave., " "

" H. B. Smith, 131 Fort Green Place, " "

" A. Sanford, 345 Tompkins Ave., " "

" James Sweeney, 192 North 6th St., " "

" C. B. Schlatter, 158 Seventeenth St., " "

" Chas. T. Schmidt, 73 Stagg St., " "

" James J. Terhune, 171 Adelphi St., " "

" William Watersworth, 493 Franklin Ave., " "

" Walter L. Ranney, 14 West 32nd St., N. Y. " "

" F. W. Knapp, Orange, N. J. " "

" W. W. Heberton, Orange, N. J. " "

"The Ideal Lustre"

Is a Peculiar Brilliancy of the Teeth,
combined with a
Ruddy Healthfulness of the Gums,
by which you can at once detect the user of the



"IDEAL" IN { NAME, NATURE, RESULTS,
as slight familiarity will prove.

Recommended by Prominent Dentists everywhere, among them Dr. T. B. Arnold, 127 W. 34th St., N. Y., writes: "It has no equal for Polishing the Teeth and Hardening the Gums."

Dr. C. H. Bartlett, a noted dentist of St. Louis, calls it: "The Best thing ever offered to the public as a cleansing agent for the teeth."

Adopted in Hospitals for its cleanliness and freedom from infectious results; as a fresh polisher can be used every time at slight expense.

Its Economy. Holder (imperishable) 35 cents. Polishers only can be renewed. 18 (boxed) 25 cents. Dealers or mailed.

HORSEY MFG CO., Utica, N. Y.

TO ADVERTISERS!

For a check for \$20 we will print a ten-line advertisement in One Million issues of leading American Newspapers and complete the work within ten days. This is at the rate of only one-fifth of a cent a line, for 1,000 Circulation! The advertisement will appear in but a single issue of any paper, and consequently will be placed before One Million different newspaper purchasers; or FIVE MILLION READERS, if it is true, as is sometimes stated, that every newspaper is looked at by five persons on an average. Ten lines will accommodate about 75 words. Address with copy of Adv. and check, or send 30 cents for Book of 256 pages.
GEO. P. ROWELL & CO., 10 SPRUCE ST., NEW YORK.

We have just issued a new edition of our Book called "Newspaper Advertising." It has 256 pages, and among its contents may be named the following Lists and Catalogues of Newspapers:—

DAILY NEWSPAPERS IN NEW YORK CITY, with their Advertising Rates.

DAILY NEWSPAPERS IN CITIES HAVING more than 100,000 population, omitting all but the best.

DAILY NEWSPAPERS IN CITIES HAVING more than 200,000 population, omitting all but the best.

A SMALL LIST OF NEWSPAPERS in which to advertise every section of the country: being a choice selection made up with great care, guided by long experience.

ONE, NEWSPAPER IN A STATE. The best one for an advertiser to use if he will use but one.

BARGAINS IN ADVERTISING IN DAILY Newspapers in many principal cities and towns, a List which offers peculiar inducements to some advertisers.

LARGEST CIRCULATIONS. A complete list of all American papers issuing regularly more than 25,000 copies.

THE BEST LIST OF LOCAL NEWSPAPERS, covering every town of over 5,000 population and every important county seat.

SELECT LIST OF LOCAL NEWSPAPERS, in which advertisements are inserted at half price.

6472 VILLAGE NEWS PAPERS, in which advertisements are inserted for \$12.15 a line and appear in the whole lot—one half of all the American Weeklies.

Book sent to any address for **THIRTY CENTS.**



VACCINE VIRUS.

Pure and Reliable Animal Vaccine
Lymph, Fresh Daily.

LIBERAL TERMS. SEND FOR CIRCULAR.

10 Ivory Points.....double charged, \$1.00
10 Quill Slips (half quills).....double charged, 1.00
Orders by Mail or Telegraph promptly dispatched.

NEW ENGLAND VACCINE CO.,
Chelsea Station, Boston, Mass.

WM. C. CUTLER, M. D.

J. F. FRISBIE, M. D.

CHAS. R. AVERY,
PHARMACIST,

447 COURT ST., Cor. 4th PLACE,

BROOKLYN, N. Y.

Prescriptions carefully compounded.

PARKE, DAVIS & Co.'s AND SQUIBB'S
PREPARATIONS IN STOCK.

Telephone Call, 1023.

CHARLES DENNIN,
Druggist & Apothecary

FIRST PLACE,

Cor. Court St. BROOKLYN, N. Y.

TELEPHONE CONNECTION.

SQUIBB'S PREPARATIONS DISPENSED.

CELERINA

NERVE TONIC, STIMULANT AND ANTISPASMODIC.

FORMULA.—Every Fluid Drachm represents FIVE grains EACH—Celery, Coca, Kola, Viburnum and Aromatics.

INDICATIONS.—Loss of Nerve-Power (so usual with Lawyers, Preachers, Writers and Business Men), Impotency, Spermatorrhea, Nervous Headache, Neuralgia, Paralysis, Hysteria, Opium Habit, Inebriety, Dyspepsia, and ALL Languid conditions of the System.

Indispensable to restore a patient after alcoholic excess.

DOSE.—One or two Teaspoonfuls three or more times a day, as directed by the Physician.

LIQUID IRON-RIO

Palatable and easily assimilated. Does not produce Nausea, nor irritate the Stomach. Does not Cause Headache, nor Constipate. Does not Stain the Teeth. It is so Acceptable to the Stomach that its Use is Admissible when all other forms of Iron would be rejected. Being so Readily Assimilable, it only requires a small Dose.

Each Fluid Drachm contains ONE GRAIN of Iron in a Pleasant and Digestible Form.

DOSE.—One or more Teaspoonfuls as indicated, during or after meals.

S. H. KENNEDY'S

CONCENTRATED EXTRACT OF

PINUS CANADENSIS

DARK.

A NON-ALCOHOLIC LIQUID.

WHITE.

A MOST VALUABLE NON-IRRITATING MUCOUS ASTRINGENT.

INDICATIONS.—Albuminuria, Diarrhea, Dysentery, Night-Sweats, Hemorrhages, Profuse Expectoration, Catarrh, Sore Throat, Leucorrhea, and other Vaginal Diseases, Piles, Sores, Ulcers, Burns, Scalds, Gonorrhea, Gleet, Etc.

When Used as an Injection, to Avoid Staining of Linen, the WHITE Pinus should be used.

RECOMMENDED BY PROMINENT EUROPEAN AND AMERICAN PHYSICIANS.

RIO CHEMICAL CO., St. Louis, Mo., U. S. A.

LONDON.

PARIS.

CALCUTTA.

MONTREAL.

MEDICO-CHIRURGICAL COLLEGE, OF PHILADELPHIA.

SESSIONS OF 1888-1889.

FACULTY.

JAMES E. GARRETSON, A.M., M.D.,
Professor of Oral Surgery and of Clinical Surgery.
WILLIAM H. PANCOAST, A.M., M.D.,
Professor of General, Descriptive and Surgical Anatomy, and of Clinical Surgery.
GEORGE E. STUBBS, A.M., M.D.,
Professor of Surgical Pathology and Clinical Surgery.
WILLIAM F. WAUGH, A.M., M.D.,
Professor of Principles and Practice of Medicine and of Clinical Medicine.
ABRAHAM S. GERHARD, A.M., M.D.,
Professor of General Pathology and of Medical Jurisprudence.
WILLIAM S. STEWART, A.M., M.D.,
Professor of Obstetrics and of Clinical Gynaecology.
H. EARNEST GOODMAN, M.D.,
Professor of Principles and Practice of Surgery, Orthopaedics and of Clinical Surgery.

PETER D. KEYSER, A.M., M.D., DEAN,
Professor of Ophthalmology.
THOMAS C. STELLWAGEN, M.A., M.D.,
Professor of Physiology.
FRANK WOODBURY, A.M., M.D.,
Professor of Materia Medica and Therapeutics, and of Clinical Medicine.
SAMUEL B. HOWELL, A.M., M.D.,
Professor of Chemistry.
JOHN V. SHOEMAKER, A.M., M.D.,
Professor of Skin and Venereal Diseases.
EDWARD E. MONTGOMERY, B.S., M.D.,
Professor of Didactic and Clinical Gynaecology.
WILLIAM B. ATKINSON, M.A., M.D.,
Professor of Sanitary Science and of Pediatrics.

OTHER INSTRUCTORS.

ISAAC BARTON, M.D.,
Lecturer on Laryngology and Chief Asst. in Throat Clinic.
M. H. CRYER, M.D., *Lecturer on Oral Surgery.*
FRANK FISHER, M.A., M.D.,
Lecturer on Ophthalmoscopy, and Chief Assistant in Eye Clinic.
BENJAMIN T. SHIMWELL, M.D.,
Lecturer on Minor surgery, and Chief-Assistant in Prof. Goodman's and Garretson's Surgical Clinic.
W. G. MCCONNELL, M.D., *Lecturer on Venereal Diseases.*
SPENCER MORRIS, M.D., *Lecturer on Symptomatology*
CONRAD BERENS, A.B., M.D.,
Lecturer on Otolgoy, and Chief-Assistant in Ear Clinic
W. XAVIER SUDDUTH, M.D., F.R.M.S.,
Lecturer on Diseases of the Genito-Urinary System, and Demonstrator of Pathological Histology.
HENRY C. BOENNING, M.D., *Demonstrator of Anatomy.*
E. S. GANS, M.D., *Instructor in Dermatology.*
E. L. B. GODFREY, M.D., *Lecturer on Fractures.*
A. E. ROUSSEL, M.D., *Adjunct to the Chair of Practice*
L. HARRISON METTLER, M.D.,
Lecturer on Electro-Therapeutics.
G. W. McCASKY, M.D.,
Lecturer on Mental and Nervous Diseases.
WILLIAM M. WELSH, M.D.,
Lecturer on the Eranthenata.
CHARLES M. SELTZER, M.D.,
Lecturer on Therapeutic Dietetics.
MAX J. STERN, M.D., *Instructor in Laryngology.*

E. L. VANSANT, M.D.,
Chief-Assistant in Medical Dispensary; Demonstrator of Normal Histology.
JOHN AULDE, M.D.,
Demonstrator of Physical Diagnosis.
J. W. WEST, M.D., *Demonstrator of Gynaecology.*
L. GREENBAUM, M.D., D.D.S.,
Demonstrator of Chemistry.
HENRY FISHER, Ph. G., M.D.,
Demonstrator of Pharmacy.
E. GREWER, M.D., *Demonstrator of Practical Physiology.*
T. RIDGWAY BARKER, M.D.,
Assistant in Clinical Surgery.
M. F. LORMAN, M.D.,
Chief-Assistant to the Surgical Clinic.
ROBERT WHARTON, M.D.,
Assistant in Surgical Clinic.
VICTOR G. R. RHEN, M.D.,
Assistant in Pediatrics.
LOUIS VON COTZHAUSEN, M.D., Ph.G.,
Assistant in Medical Clinic.
J. J. TAYLOR, M.D., *Assistant in Medical Clinic.*
W. J. HOLLY, M.D., *Assistant in Surgical Clinic.*
C. FITZPATRICK, JR., M.D.,
Assistant in Surgical Clinic.
W. A. N. DORLAND, M.D., *Assistant in Gynaecology.*
A. J. SAVAGE, M.D., *Assistant in Clinical Surgery.*
P. S. DONNELLAN, L.K.Q.C.P., L.R.C.S.I., L.M.,
Assistant in Medical Dispensary.
C. L. FISHER, M.D.,
Assistant in Prof. Pancost's Surgical Clinic.

Every candidate for admission who does not present a degree in Arts or Sciences, a certificate of graduation in a high or normal school, or a certificate of having passed a satisfactory examination of a duly organized County Medical Society, must undergo an examination in English, Latin, Physics and Mathematics. The examination may be conducted by one of the Censors or at the College. Instruction is given by lectures, clinical teaching and practical demonstrations. In the subjects of Anatomy, Pharmacy, Chemistry, Histology and Pathology Anatomy, the usual methods of instruction are largely supplemented by laboratory work. The year begins Sept. 10th, and is divided into a preliminary session of three weeks, a Regular session of six months and a Spring session of ten weeks. Students are divided into three classes according to their time of study and proficiency. Students who have begun their professional studies elsewhere may be admitted to advanced standing upon satisfactory examination in the branches already pursued by the class to which they seek admission. Although the degree of DOCTOR OF MEDICINE is conferred at the end of three years' study, a fourth year is provided which is voluntary (but) attendance upon which will afford the student increased facilities for practical study in clinical medicine, surgery and the various specialties.

ORDER OF STUDIES:

FIRST YEAR:—Anatomy (bones and ligaments), Physiology, General Chemistry, Materia Medica and Pharmacy, General Pathology and Hygiene. SECOND YEAR:—Anatomy (muscles, vessels and viscera), Medical Chemistry, Physiology, Physical Diagnosis, Therapeutics, Clinical Medicine, and Clinical Surgery. THIRD YEAR:—Anatomy (Nervous System), Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgical Pathology, Surgery, Clinical Surgery, Ophthalmology, Dermatology, Syphilis, Diseases of Women, Diseases of Children, Electro-Therapeutics and Forensic Medicine. FOURTH YEAR:—Ophthalmology, Otolgoy, Dermatology, Syphilis, Laryngology, Mental and Nervous Diseases, Diseases of Women, Diseases of Children, Clinical Medicine, Clinical and Operative Surgery, Orthopaedic Surgery, Oral Surgery, Forensic Medicine, Genito-urinary Diseases, Diseases of the Rectum, Diseases of the Female Bladder, Bacteriology, Clinical Microscopy, Preparation of Food for Infants and Invalids and Anesthetics.

REQUIREMENTS FOR A DEGREE:—Every candidate must be twenty-one years of age, must have attended three or four full terms, one Winter session of which was spent at this school, have passed a written examination upon the prescribed studies of the course.

FEES:—Matriculation, \$5; for the first and second years, each, \$75; for the third year (graduation included), \$100; for the fourth year, to graduates of this school free; to graduates of other schools upon the payment of a matriculation fee, only graduates of a three years school will be permitted to join the graduating class for the degree of this school upon the payment of a fee of \$10. The above fees are conditional upon their being paid before Nov. 1st.

For further information, or Catalogue, address

Dr. E. E. MONTGOMERY, Sec'y, 1818 Arch St., or
Medico-Chirurgical College, Philadelphia, Pa.

THE STROUT Heating and Ventilating System,

FOR DWELLING HOUSES, CHURCHES AND
PUBLIC HALLS.

H. C. STROUT & CO.

(Successors to Strout & Williams),

MANUFACTURERS OF

Strout's Patent Heating and Ventilating Attachments.

OFFICE:

No. 564 STATE ST., Cor. Flatbush Ave., BROOKLYN, N. Y.

The object of the Strout System is to equalize the temperature of buildings and prevent direct drafts and an unequal distribution of hot air, regulating its circulation so that all portions, upper and lower, shall be of uniform temperature and purity.

The system is exclusively adapted to dwelling houses, churches and all public halls and buildings that are heated from either the enclosed or portable furnace. It can readily be applied to any furnace in present use. The practical introduction of the same has invariably shown:

1. Its health-giving qualities in preserving at all times a pure circulation of heated air.
2. It makes the furnace distribute its maximum of heat, with a saving in coal of not less than 25 per cent., and in churches and public halls the gain is even greater.

For further particulars and circulars, address manufacturers as above.

MEDICAL BATTERIES WITHOUT FLUID.

A NEW SYSTEM. THE LATEST PROGRESS.

Galvanic Batteries - with DRY CELLS.
 Faradic Batteries - with DRY CELLS.
 Combination Batteries with DRY CELLS.
 Office Batteries - - with DRY CELLS.

Batteries that work for over Two Years

Without any change or attention or expense whatever.

Batteries that when used up may be refitted with entirely new cells at a nominal cost.

Fifty-Volt Batteries that weigh, complete, 11 lbs.,

And are good for upwards of two years of physicians' use.

Milliampere-Meter.

Electrodes.

J. A. PFARRE OF
 Geo. Tiemann & Co.,
President.
 R. P. Barrett, *Vice-Pres.*
 Claude Van Bibber, M.D.,
Secretary.
 Geo. Franke, *Treasurer.*
 Charles Willms,
Gen'l Manager.
 R. P. Barrett, *Electrician.*
 John A. Barrett,
Consulting Electrician.

THE John A. Barrett Chloride of Silver Batteries.

READ A FEW EXTRACTS FROM WELL-KNOWN PHYSICIANS.

"I have had one of his batteries in use now for two years and have been more than pleased with it. I have used many kinds of batteries, but I think the Barrett Battery is by all odds the best, if not the only one worth having. No dirt, no continual refilling with acids, no getting out of order, and if the patient won't come to the battery, the battery can come to the patient."
 71 Marlborough St., Boston, Dec. 22, 1887.
 MORTON PRINCE.

"I take pleasure in stating that I have used your Chloride of Silver Battery some three years and that I am entirely satisfied with it."
 158 Montague St., Brooklyn, Nov. 21, 1887.
 LANDON CARTER GRAY, M. D.

"I have used your Galvanic Battery for more than a year and can testify to its great convenience and efficiency. It is the best portable battery that has come to my own notice."
 106 Marlboro St. Boston, Nov. 10, 1887.
 JAMES J. PUTNAM.

"I have for some time past used the Chloride of Silver Galvanic Batteries furnished by J. A. Barrett, and find them very satisfactory. The Dry Chloride of Silver Battery for portability, strength and constancy is the best I have ever used."
 514 Cathedral St., Baltimore, Nov. 17, 1887.
 F. T. MILES, M. D.

"It is now over two years since I bought my 50 Cell Barrett Battery of you. It may please you to know that after a constant well high daily use of it, I find it to-day the same clean, comfortable, trustworthy ally that it has been from the beginning."
 106 State St., Portland, Maine, Nov. 14, 1887.
 WALTER WOODMAN.

"My Battery has now been in daily use for two years, and has never failed me,"

Saratoga, Nov. 5, 1887.

W. H. HODGMAN.

IF YOUR DEALER HAS NOT

BARRETT'S CHLORIDE OF SILVER BATTERIES,

Write to THE JOHN A. BARRETT BATTERY CO.,

BALTIMORE, MD.

DIOVIBURNIA

A POWERFUL UTERINE TONIC AND ANTISPASMODIC.

The most **PERFECT** compound **EVER OFFERED** to the **MEDICAL PROFESSION** for the relief of the following female disorders: **DYSMENORRHOEA, AMENORRHOEA, MENORRHAGIA, LEUCORRHOEA, SUBINVOLUTION, PUERPERAL CONVULSIONS, RELAXED** condition of **UTERUS** and **APPENDAGES** and **THREATENED ABORTION**; directing its action in a most remarkable manner to the entire **UTERINE** system as a general tonic and **ANTISPASMODIC**, and in cases of impaired vitality. *Complete Restoration follows its use.*

This happy combination is the result of an **EXTENSIVE PROFESSIONAL EXPERIENCE RUNNING THROUGH A SERIES OF YEARS**, in which the constituent parts have been **FULLY TESTED**, singly and in combination, in various proportions, until **PERFECTION** has been **ATTAINED**. We, with the profession, have no regard for secret remedies.

DIOVIBURNIA

is prepared for prescribing exclusively, and the Formula as given, will commend itself to every intelligent physician.

FORMULA.

VIBURNUM PRUNIFOLIUM, VIBURNUM OPULUS, DIOSCOREA VILLOSA, ALETRIS FARI-
NOSA, HELONIAS DIOICA, MITCHELLA REPENS, CAULOPHYLLUM
THALICTROIDES, SCUTELLARIA LATERIFLORA.

Every ounce contains ¾ dram each, of the fluid extract. For further information see bottom of this page.

PALPEBRINE

A TRUSTWORTHY REMEDY IN EXTERNAL EYE DISEASES.

The forms of disease for which this compound is highly recommended are the following:
Simple Conjunctivitis, Acute and Chronic Catarrhal Conjunctivitis, Vernal Conjunctivitis, Acute and Chronic Blepharitis, Strumous or Scrofulous Conjunctivitis, Marginal Blepharitis and Inflammation of the Lachrymal Sac.

PALPEBRINE is not a *secret* remedy, and in offering it to the general practitioner we give the formula in full. It contains no unknown and untried agents, but is composed of the following well-known drugs which will commend it to the profession at once.

FORMULA AND MEDICAL PROPERTIES:

ACIDUM BORACICUM, [an antiseptic]	-	-	-	One per cent.
HYDRARGYRUM BICHLORIDUM, [an antiseptic and irritant]	-	-	-	One part in 5,000.
TINCTURE OF OPIUM, [nerve tonic, slightly narcotic]	-	-	-	A trace.
ZINCUM SULPHURICUM, [an irritant astringent]	-	-	-	One part in 1,000.
GLYCERINUM PURUM, [an irritant]	-	-	-	One part in 10.

EYE diseases are the best and most fruitful field for quackery, and the amount of harm being done by *quacks* and *patent medicines* in eye diseases is fearful to behold. In offering **PALPEBRINE** to the profession we wish to give to the busy practitioner a reliable and safe remedy, easily prescribed, of known qualities and quantities. We are certain after a trial our efforts will be appreciated.

TO any physician, unacquainted with the medicinal effects of **DIOVIBURNIA** and **PALPEBRINE**, we will mail pamphlet containing full information, suggestions, commendations of some of the most prominent practitioners in the profession, and various methods of treatment; also a variety of valuable prescriptions that have been thoroughly tested in an active practice, or to physicians desiring to try our preparations, and who will pay express charges, we will send on application a full size bottle of each free.

DIOS CHEMICAL COMPANY, ST. LOUIS, MO., U. S. A.

THE
AMERICAN MEDICAL DIGEST
A MONTHLY EPITOME
OF
MEDICAL LITERATURE AND SCIENCE.

This old established Magazine is claimed by the Medical Profession to be the most useful, as it is conceded to be the most popular Medical Journal published in America, presenting as it does each month in attractive and readable form, a skillfully condensed Digest of the best current Medical Literature of this Country and Europe, prepared directly for its pages by a corps of well known specialists, under able editorial supervision.

The issues of each year constitute a complete volume, in which is embodied a comprehensive record of the World's Medical and Surgical achievements during that period, concisely stated, carefully classified and extensively illustrated.

It is distinctively

A JOURNAL OF MEDICAL PROGRESS,

replete with information and practical suggestions that are invaluable to the busy practitioner, who would be compelled to search through the technical literature of the whole world to find the same facts outside of its pages.

The Physician by its aid is enabled to save time, labor and expense, in keeping himself thoroughly informed in all that is occurring in his profession which it would be useful for him to know, and its regular monthly appearance precludes all possibility of his falling behind his colleagues in familiarity with the progress of the period.

Its practical value is attested to by nearly Seven Years of successful existence, and the unflinching testimony of its extensive list of subscribers is that

NO DOCTOR CAN AFFORD TO BE WITHOUT IT

who is ambitious of occupying a creditable position in or near the front rank of his profession.

Determined to extend its field of usefulness to the furthest attainable limits, the management of THE AMERICAN MEDICAL DIGEST has at considerable expense brought new influences to bear upon its interests, which, without altering, will, it is believed, considerably expand its scope. All that it has been in the past it will continue to be, while new features will be added from time to time which will increase its utility and value.

Meanwhile the Subscription Price remains

\$2 PER YEAR.

payable in advance to the Publishers

The Analyst Publishing Company,
19 PARK PLACE,
NEW YORK.

A Peerless Chemico-Physiological Food and Restorative

**Crystalline
Phosphate**

**A
TISSUE FOOD**



Contains all essential inorganic components of the tissues in a semi-solid, easily soluble, crystalline mass,

COMPOSED OF

ACID PHOSPHATE OF CALCIUM.

WITH

Acid Phosphate of Magnesium,
" " " Iron,
" " " Sodium,
" " " Potassium,

Chloride of Potassium,
" " Sodium
Sulphate of Potassium,
and Phosphoric acid.

INDICATIONS:

STOMACH DISORDERS, such as Indigestion, Flatulence Gastric Catarrh, and Poor Appetite, Constipation, etc.

WRONGS OF NUTRITION, as in Scrofula, Rickets, Caries, Marasmus, Delayed Union of Fractures, Necrosis of Tissue, Difficult or Delayed Dentition and Development, etc.

NERVOUS AND GENERAL DEBILITY AND SLEEPLESSNESS, as from Sexual Excess, Venereal Disease, Childbearing, Nursing, Loss of Blood or other fluids, Menstrual and other Diseases of Women, abuse of Alcohol, Tobacco and Narcotics, Protracted Illness, etc.

WASTING DISEASE.—"As a reconstructive or tissue food in convalescence from fevers and all wasting diseases **CRYSTALLINE PHOSPHATE** is an admirable remedy."

E. YUNKIN, M. D., Prof. Surgery Am. Med. Col., St. Louis, Mo.

ATONIC DYSPEPSIA.—"I have used **CRYSTALLINE PHOSPHATE** in several cases of Atonic Dyspepsia with the best results.

JOSEPH EICHBERG, M. D., 377 West 7th Street, Cincinnati, Ohio.

Write for Samples and Treatise—Mailed Free. Mention this Journal.

PROVIDENT CHEMICAL WORKS, - - ST. LOUIS, MO., U. S. A.

E. C. RICH CO., Limited, New York City, Eastern Agents,

BOUND VOLUMES FOR 1888.

Subscribers sending us the twelve numbers for 1888 with \$1, can have them returned handsomely bound. Any missing number will be supplied for twenty cents additional.

THE ANALYST PUBLISHING CO.,

19 Park Place,

New York.

IMPORTANT REDUCTION IN PRICES OF THE *Fairchild Digestive Tablets.*

These special preparations of the Digestive Ferments have been from the outset favorably received by practitioners and patients.

During the past years they have been in constantly growing demand, and it is with much satisfaction that we now announce that, owing to their extensive use, we are able to offer these preparations at prices which render them freely available.

The Fairchild Digestive Tablets are now placed in the hands of dispensing pharmacists at an average reduction of twenty-five per cent. on the entire list of these preparations.

The special value of these Tablets lies in their convenience, accuracy and agreeability of dosage. They are dispensed in small vials, which may be conveniently carried in the pocket, and are thus available at such intervals prior to or during the progress of digestion as may seem best to the prescriber.

By this means, pepsine, for instance, may be exhibited in small doses at frequent intervals after the ingestion of food—a rational method of reinforcing the peptic digestion.

The pancreatic ferments may be thus given before meals, or after the gastric activity has diminished and thus the best results may be, upon accepted physiological grounds, reasonably anticipated in the treatment of intestinal indigestion.

Both peptic and pancreatic tablets are made in such combinations as are found most serviceable and proper by practitioners.

Pepsine and Bismuth may be especially referred to as being a perfectly compatible preparation; as in this combination we have sub-nitrate of bismuth which is not open to the objections made against ammonia-citrate, the salt of bismuth resorted to in liquid preparations of "pepsine and bismuth."

The compound Pancreatic Tablets are well thought of in the treatment of intestinal indigestion, being especially devised for this purpose—containing 2 grains of Pancreatic Extract, 3 grains Squibb's bismuth sub-nitrate and 1-10 grain powdered Ipecac in each Tablet.

Complete lists and descriptions will be cheerfully sent upon application.

FAIRCHILD BROS. & FOSTER,
Makers of Original and Reliable Preparations of the Digestive Ferments,
NEW YORK and LONDON.

THE AMERICAN MEDICAL DIGEST

ISSUED IN
MONTHLY PARTS

VOL. VIII.

MARCH 15, 1889.

PART 3.

TWO DOLLARS A YEAR.

INDEX ON PAGE 2.

EDITED BY
JOHN C. LESTER, A.M., M.D.

COLLABORATORS.

ALEXANDER J. C. SKENE, M.D.,

Professor of the Medical and Surgical Diseases of
Women and Diseases of Children, Long
Island College Hospital; Professor
Gynæcology at N. Y. Post-
Graduate Med. School.

ARTHUR MATHEWSON, M.D.,

Professor of Ophthalmology, Long Island College
Hospital; Surgeon to Brooklyn Eye
and Ear Hospital.

LONDON CARTER GRAY, M.D.,

Professor of Nervous and Mental Diseases, N. Y.
Polyclinic.

BENJ. F. WESTBROOK, M.D.,

Chief of Dept. Diseases of Chest, at St. Mary's
Gen. Hospital.

A. H. BUCKMASTER, M.D.

F. R. STURGIS, M.D.,

Professor Venereal Diseases, N. Y. Post-Graduate
Med. School; Ex-President N. Y. County
Medical Society; Visiting Surgeon
to Charity Hospital.

GEORGE HENRY FOX, M.D.,

Clinical Professor of Diseases of the Skin, College
Physicians and Surgeons, New York.

CHARLES JEWETT, M.D.,

Professor Obstetrics, Long Island College Hospital,
ex-President Kings County Medical Society.

A. H. P. LEUF, M.D.,

Demonstrator of Anatomy and Histology and
Lecturer on Pathology at the Pennsylvania
School of Anatomy and Surgery.

R. G. ECCLES, M.D.

NEW YORK:
ANALYST PUBLISHING CO.
19 Park Place.

Entered at the Post Office at New York, N. Y., as second-class matter.
Copyrighted, 1882, by the American Medical Digest Publishing Company.

LACTOPEPTINE.

The most important Remedial Agent ever presented to the Profession for

Dyspepsia, Vomiting in Pregnancy, Cholera Infantum, Constipation, and all Diseases arising from Imperfect Nutrition.

LACTOPEPTINE precisely represents in composition the natural digestive juices of the Stomach, Pancreas and Salivary Glands, and will, therefore, readily dissolve all foods necessary for the recuperation of the human organism.

LACTOPEPTINE

IS COMPOUNDED WITH

Gentian, Iron, Strychnia, Bismuth, Quinia, Calisaya, Cinchona and Phosphates,

And various Medications required in general Practice in the form of
ELIXIRS, SYRUPS, LIQUIDS, Etc.

Special Notice to the Medical Profession.

Whenever satisfactory results are not obtained from the administration of **Lactopeptine** we will consider it a favor if such facts are reported to us, for there can be no doubt that substitution of Pepsin or some of the cheap imitations of Lactopeptine has been practised, whenever the therapeutic activity of Lactopeptine is not uniformly demonstrated in its indications. *Send address for our new MEDICAL ALMANAC, containing valuable information.*

THE NEW YORK PHARMACAL ASSOCIATION

Box 1574.

NEW YORK.

SUCCUS ALTERANS.

(McDADE.)

SUCCUS ALTERANS is a purely vegetable compound of the preserved juices of *Stillingia Sylvatica*, *Lappa Minor*, *Phytolacca Decandra*, *Smilax Sarsaparilla* and *Xanthoxylum Carolinianum*, as collected by DR. GEO. W. McDADE exclusively for ELI LILLY & Co., and endorsed by DR. J. MARION SIMS.

SUCCUS ALTERANS continues to gain favor from its remarkable Alterative and Tonic properties, *eliminating specific poison from the blood and increasing the proportion of red corpuscles in anæmic patients* to a wonderful degree; is endorsed by the medical profession and in use by many hospitals of note.

SUCCUS ALTERANS in venereal and cutaneous diseases is fast supplanting Mercurialization, Iodism and the dreadful effects often following the use of Arsenic in skin diseases.

SUCCUS ALTERANS is also strongly recommended for its Tonic and Alterative effects in myriad forms of scrofulous disease, and in all cases where anæmia is a factor. Such patients rapidly develop a good appetite, sleep soundly and gain flesh rapidly. Many cases are on record where patients increased ten to twenty-five pounds in weight in a few weeks.

SUCCUS ALTERANS is giving satisfactory results in treatment of *Chronic Rheumatism* and can be used with confidence.

SUCCUS ALTERANS may be given for any length of time, without injury to the patient.

SUCCUS ALTERANS is put up in pint round amber bottles and *never in bulk.*

PHYSICIANS who have not received DR. McDADE's latest publication, the *MONOGRAPHIA SYPHILITICA*, should send their address, mentioning this journal, and we will mail a copy. It contains a paper, illustrated with colored plates, by DR. D. H. GOODWILLIE, of New York, on the "Sequelæ of Syphilis," reports of cases in practice and many other valuable papers.

ELI LILLY & CO., Pharmaceutical Chemists,
Indianapolis, Ind., U. S. A.

SUPPLIED BY ALL DRUGGISTS.

JOHN J. DONALDSON, President.

HERMANN SCHAEFFER, Vice-Prest.

A. L. DONALDSON, Treasurer.

THE DR. JAEGER'S
Sanitary Woolen System Company,
827 & 829 BROADWAY, NEW YORK.

BRANCH HOUSES:

199 BROADWAY, New York,
(Western Union Building.)

366 FULTON ST., Brooklyn. N. Y.

We beg to call attention to our

COMPLETE ASSORTMENT

OF

Men's, Women's and Children's Underwear,

From the *heaviest* to the *lightest* weights; well known to be the finest and softest in the market, and *guaranteed* to be all pure wool.

Catalogues, containing descriptions, illustrations, samples of materials, and a full price list, free by mail. *Mail orders promptly attended to.*

Orders for goods, by mail or express, and letters of inquiry, should be addressed to

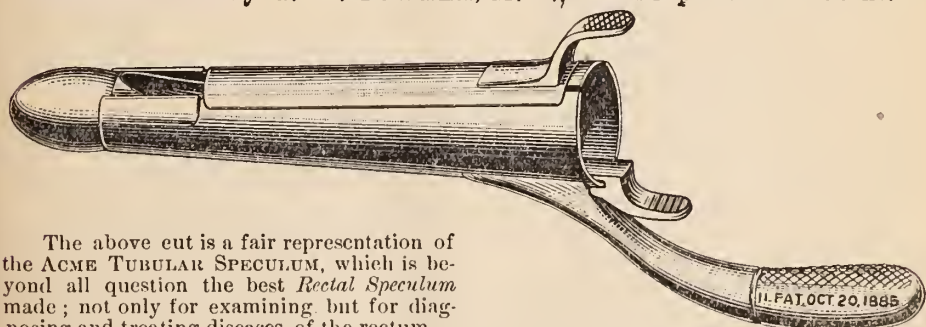
Dr. JAEGER'S SANITARY WOOLEN SYSTEM COMPANY,
827 and 829 Broadway, New York.

New York, February 23, 1889.

THE IMPROVED
ACME TUBULAR SPECULUM.

Patented Oct. 20, 1885.

Manufactured by G. W. POWELL, M. D., Sole Proprietor of Patent.



The above cut is a fair representation of the ACME TUBULAR SPECULUM, which is beyond all question the best *Rectal Speculum* made; not only for examining but for diagnosing and treating diseases of the rectum.

The tube is made of Phosphor Bronze, a flexible, tough and elastic metal, and its walls are so thin as to give for observation and operation, the greatest possible amount of space with the least amount of distention of the sphincters. The entering end of the tube is closed by a short conical removable plug, which is manipulated by a flat stem which lies along the inner surface of the tube. This plug may be withdrawn, after the speculum is inserted, for examining and treating parts above the end of the tube, or it may as conveniently be left in place while dealing with tissue through the slot of the tube.

The slot is closed by a slide which may be withdrawn to any extent desired by the operator; the slot may be widened or narrowed to meet the demands of each case, this is readily accomplished and its widened or narrowed capacity secured as needed, by means of the handles and the nuts on the cross bar. Thus it will at once be seen that the speculum may be used either with closed or opened end, and its slot running the entire length of the tube may be opened to any width bearable to the patient, while at the same time the sphincters are held entirely out of the way and uniformly supported.

No other speculum enables the surgeon to accomplish so much and being so easy and painless to the patient, the success of the operator depends greatly on having a speculum in which treatment can be properly applied. Price, \$5. Address,

Dr. G. W. POWELL, Moriah, N. Y.

INDEX.

MEDICINE.

	PAGE		PAGE
Beer Compared with other Alcoholics.....	38	Inebriety and Medical Jurisprudence.....	37
Brain Waste—What to Eat.....	35	Jaundice—Infectious.....	42
Bright's Disease—Therapeutics of.....	46	Malarial Fever—Micro-Organisms in.....	38
Cholera—Prophylaxis and Treatment.....	43	Paralysis—General Subacute.....	39
Corpulence—Pure Milk in.....	33	Pneumonia Lobar—Study of, Satterthwaite.....	44
Diagnosis—Notes on, Dr. Lowman.....	36	Spinal Reflexes—Clinical Value.....	40
Diabetes—Bread for.....	47	Sulphonal—Clinical Experiences, Norman.....	41
“ Kidneys in, Fichtner.....	48	Typhoid Fever—Baths in.....	39
Eat—What to, in Brain Waste.....	35		

SURGERY.

	PAGE		PAGE
Antiseptic Chloride of Sodium and Corrosive Sub- limate Combined.....	37	Ophthalmology—Creoline in.....	47
Antrum of Highmore—Diagnosis of Diseases in...	37	Pancreas—Experimental Excision.....	34
Baldness—Treatment of.....	44	Plaster-of-Paris Dressing—Sayre.....	34
Boil—To Abort.....	37	Scalp-Wounds—Treatment of, Old Method.....	33
Creoline in Diseases of the Eye.....	48	Spinal Support—Plaster-of-Paris Dressing in.....	34
“ Ophthalmology.....	47	Sponge—Substitute for.....	37
Eczema Rectal—Monroe.....	43	Surgery—Aphorisms in.....	37
Eye Diseases—Creoline in.....	48	Surgical Dressing—New.....	35
Eyelids—Granular, Ointment for.....	48	Sweating—Chromic Acid in.....	44
Face Powder.....	44	Tongue Amputation to Control Hemorrhage ..	38
Gonorrhea—Novel Method of Treatment.....	45	Torticollis—Operation for.....	38
Hemorrhage—Methods of Arresting.....	34	Tumors—Connective Tissue.....	35
Hydrocele—Operative Treatment.....	46	Tumors—Resections of Venous Trunks in Opera- tion on.....	36
Liniment—Anodyne.....	37		

DISEASES OF WOMEN AND CHILDREN, AND OBSTETRICS.

	PAGE		PAGE
Alexander's Operation.....	35	Pregnancy and Puerperal Eclampsia—Albuminuria in.....	48
Birth Palsies.....	43	Puerperal Eclampsia and Pregnancy—Albuminuria in.....	48
Cervix Uteri—Epithelioma of—Goodell.....	35	Rachitis—Studies Concerning.....	40
Children—Apparatus for Resuscitating.....	43	Teeth—Causes of Irregular Positions ..	39
Chorion—Hydatids of.....	47	Urethrocele—Cause and Treatment.....	38
Corset Question ..	39	Utero-Ovarian System—Action of Certain Drugs on.....	36
Fibroid Tumors of Uterus—Treatment of ..	33	Uterus—Action of Ergot on.....	34
Hymen Hypertrophied—with Absence of Uterus and Appendages.....	37	Uterus and Appendages—Absence of, with Hyper- trophy of Hymen.....	37
Infants—Regulation of Heat of.....	42	Uterus—Fibroid Tumors of, Treatment.....	33
Labor—Method of Preventing Rupture of Peri- neum.....	46		
Metritis—Chronic, Webber on.....	37		
Perineum—Method of Preventing Rupture.....	46		
Publishers' Department.....	34		V

DOCTOR, Do you want to buy or sell a
PRACTICE OR DRUG STORE?

PARTNERS, ASSISTANTS and SUBSTITUTES furnished. Some fine locations for sale. Send full particulars with stamp to

Dr. E. G. JONES,
372 Union Avenue. PATERSON, N. J.

BROMIDIA

THE HYPNOTIC.

FORMULA.—

Every fluid drachm contains 15 grains EACH of Pure Chloral Hydrat. and purified Brom. Pot., and one-eighth grain EACH of gen. imp. ext. Cannabls Ind. and Hyoscyam.

DOSE.—

One-half to one fluid drachm in WATER or SYRUP every hour, until sleep is produced.

INDICATIONS.—

Sleeplessness, Nervousness, Neuralgia, Headache, Convulsions, Colic, Mania, Epilepsy, Irritability, etc. In the restlessness and delirium of fevers it is absolutely invaluable.

IT DOES NOT LOCK UP THE SECRETIONS.

PAPINE

THE ANODYNE.

Papine is the Anodyne or pain-relieving principle of Opium, the Narcotic and Convulsive Elements being eliminated. It has less tendency to cause Nausea, Vomiting, Constipation, Etc.

INDICATIONS.—

Same as Opium or Morphia.

DOSE.—

(ONE FLUID DRACHM)—represents the Anodyne principle of one-eighth grain of Morphia.

BATTLE & CO.,

CHEMISTS' CORPORATION,

BRANCHES:

76 New Bond Street, London, W.

5 Rue de la Paix, Paris.

9 and 10 Dalhousie Square, Calcutta.

ST. LOUIS, MO.

Specify "Battle" when Prescribing Our Preparations.

Specify "Battle" when Prescribing Our Preparations.

COLDEN'S

LIQUID BEEF TONIC.

ORIGINAL LABEL:
"Colden's Liebig's Liquid Extract of Beef
and Tonic Navigator."

An Invaluable Aid in the Treatment of all Cases of Debility.

ESTABLISHED 15 YEARS. ENDORSED BY SCORES OF PHYSICIANS. BEWARE OF IMITATIONS.

ESSENTIALLY DIFFERENT FROM ALL OTHER BEEF TONICS.

COLDEN'S LIQUID BEEF TONIC consists of the Extract of Beef (by Baron Liebig's process), spirit of Iron, Cinchona, Gentian, and simple aromatics. An official analysis of this preparation by the eminent chemist, ARTHUR HILL HASSALL, M.D., F.R.S., and an endorsement of by Sir ERASMUS WILSON, F.R.S., is printed on the label of each bottle.

In the treatment of all cases of Debility, Convalescence from severe illness, Anæmia, Malarial Fever, Chlorosis, Incipient Consumption, Lack of Nerve Tone, and of the Alcohol and Opium Habits, and all maladies requiring a Tonic Nutrient, it is superior to all other preparations.

It acts directly on the sentient gastric nerves, stimulating the follicles to secretion, and gives to weakened individuals that first prerequisite to improvement, an appetite.—By the urgent request of several eminent members of the medical profession, I have added to each wineglassful of this preparation two grains of SOLUBLE CITRATE OF IRON, and which is designated on the label WITH IRON, "No. 1," while the same preparation, WITHOUT IRON, is designated on the label as "No. 2."

I will, upon application, send a sample bottle of COLDEN'S LIQUID BEEF TONIC to any physician in regular standing. Please ask your Dispensing Druggist (if he has not already a supply) to order it. In prescribing this preparation physicians should be particular to mention "COLDEN'S," viz., "EXT. CARNIS FL. COMP. (COLDEN)." It is put up in pint bottles, and CAN BE HAD OF WHOLESALE AND RETAIL DRUGGISTS GENERALLY THROUGHOUT THE UNITED STATES.

C. N. CRITTENTON, Sole Agent, 115 Fulton Street, New York.

GLENN'S SULPHUR SOAP.

All physicians know the great value of the local use of Sulphur in the TREATMENT OF DISEASES OF THE SKIN. GLENN'S SULPHUR SOAP is the ORIGINAL and BEST combination of its kind, and the one now generally used. For sale by all Druggists at 25 cents a cake, or three cakes for 60 cents. Beware of counterfeits.

Wholesale Depot, C. N. CRITTENTON, 115 Fulton Street, New York.

Please mention this Journal.

CONSTANTINE'S PINE TAR SOAP.

BY FAR THE BEST TAR SOAP MADE. Has been on trial among physicians for very many years as a toilet soap and healing agent, and its superior virtues have been unanimously conceded in ALL CASES WHERE THE USE OF TAR IS INDICATED.

Unsolicited expressions of its excellence have been received from the Medical Faculty generally. None genuine unless stamped "A. A. Constantine's Puriest Healing Pine Tar Soap." For sale by all Druggists.

Samples of above Soaps sent FREE on application to any physician enclosing card.

Carnrick's Soluble Food

IS THE NEAREST APPROACH TO HUMAN MILK THAT HAS THUS
FAR BEEN PRODUCED.

During the past season a large number of Physicians and eminent Chemists visited our Laboratory at Goshen, N. Y., and witnessed every detail connected with the production of CARNRICK'S SOLUBLE FOOD. This invitation to witness our process is continuously open to Physicians and Chemists. All expenses from New York to Goshen and return will be paid by us. The care used in gathering the milk, its sterilization, and the cleanliness exercised in every step, cannot be excelled.

Pancrobilin.

Prepared (in both Liquid and Pill form) from Extract of Pancreas and Bile.

This preparation is designed expressly to increase the digestion and absorption of fats.

We believe that the fat-digesting properties of pancreatine and bile are inseparable, and that without their union in the intestinal tract but little, if any, fat would be digested and absorbed.

PANCROBILIN will be found of great service in *Phthisis and other wasting diseases, Nervous Prostration, Constipation, Inanition, Malnutrition, Intestinal Indigestion* and wherever there is a failure to assimilate fats.

If the skin is first wet with LIQUID PANCROBILIN, the imunction of oils will be greatly facilitated.

LIQUID PANCROBILIN is put up in pound bottles.

PILL PANCROBILIN is put up in bottles holding 100 pills. The coating of the pills will resist acid digestion when given as directed, but will be quickly dissolved in the alkaline secretions of the duodenum.

Phospho-Caffein Comp.

(Granular Effervescing.)

Formula for each dessertspoonful :—

Caffein.

Acidi Phosphorici ãã, grains, ss.

Antipyrin.

Ext. Apii. Grav. dulc. (Celery), ãã grains, i.

Sodium Bromide, grains, v.

The satisfactory results produced by PHOSPHO-CAFFEIN COMP. in *Headaches, Neuralgia, Insomnia, Neurasthenia and general Nervous Irritability*, are not due to the effect of any one ingredient, but to the happy effect of the combination. A thorough series of comparative tests have demonstrated the superiority of the above formula over any other in the market.

REED & CARNRICK, New York.

An Important Communication TO PHYSICIANS.

Thirteen years have now elapsed since the introduction of SCOTT'S EMULSION of PURE NORWEGIAN COD LIVER OIL with HYPOPHOSPHITES of LIME and SODA, since which time its growth and development have been very large, not only in this country but in South America, Great Britain and a large part of Continental Europe, and it has, in a very large degree, supplanted the Plain Cod Liver Oil. Its success is largely due to the happy combination of all its components, making a perfect chemical union, that will not separate for years, which we believe is not true of any other Cod Liver Oil preparation.

The innumerable reports from Physicians, of the brilliant results obtained justifies the statement that in almost every case where Cod Liver Oil is indicated, the combination of Cod Liver Oil with the Hypophosphites as prepared in Scott's Emulsion is infinitely superior.

Physicians who have never tried this Emulsion, or who have been induced to try something else in its stead, will do us the favor to send for sample, and we know they will always use it in preference to plain Cod Liver Oil or any other preparation.

We also call your attention to the following preparations :

CHERRY-MALT PHOSPHITES.

A combination of the tonic principles of Prunus Virginiana, Malted Barley, Hypophosphites of Lime and Soda, and Fruit Juices. An elegant and efficient brain and nerve tonic.

BUCKTHORN CORDIAL (Rhamnus Frangula.)

Prepared from carefully selected German Buckthorn Bark, Juglans Bark, and Aromatics. The undoubted remedy for Habitual Constipation. Send for samples of the above—delivered free. **SCOTT & BOWNE, Mfg. Chemists, 132 & 134 S. 5th Ave., N. Y.**

Electro-Medical Apparatus.

Special attention is hereby called to my new and improved

CAUTERY BATTERY.

Its advantages are: its simple construction, perfect operation, low price, and durability. I will furnish this Battery complete and ready for use, for \$18, including the following attachments, viz.: Handles and Cords, 1 Knife, 1 Point, 1 Eraseur. Over 200 now in successful operation in New York City. All Batteries guaranteed for 1 year. Address

MENO FEDDERN,

Park Ridge, Bergen Co., New Jersey.

I will gladly call and exhibit my Batteries at the office of any physician residing in New York or vicinity.

Send for

CLUB RATES on

MEDICAL JOURNALS

To ANALYST PUBL'G CO.,

19 Park Place, N. Y.

MEDICAL PRACTICES AND DRUG Stores, Bought and Sold. Lists Free. Address: THE MEDICAL TRANSFER BUREAU, Lynn, Mass.

THE BEST OF AMERICAN.

Specify

PLANTEN'S CAPSULES.

Known as Reliable over 50 years for "General Excellence."

Established 1836.

H. PLANTEN & SON, 224 William Street
NEW YORK.

SOFT and HARD CAPSULES

FILLED, OF ALL KINDS.

Nine Sizes: 3, 5, 10 and 15 Min. and 1, 2½, 5, 10 & 15 Gram.

NEW KINDS:

WINTERGREEN, APIOL,

Sandalwood, Erigeron, Terebene, Etc.

Improved. Empty, 8 sizes.

Capacity in Grains: 12, 10, 5, 4, 2, 1, ½, ¼.

For taking medicines free of taste, smell, injury to the teeth, mouth or throat.

Rectal, Vaginal, Horse, For Liquids
3 Sizes. 6 Sizes. 6 Sizes. 8 Sizes.

Trial box of all above Emptys, by mail, 25 cents,

Capsules for Mechanical Purposes.

New Articles, and Capsuling Private Formulæ, a Specialty. Sold by all Druggists. Samples free.

Specify PLANTEN'S on all orders.

**THE BEST ANTISEPTIC.
FOR BOTH INTERNAL AND EXTERNAL USE.**

LISTERINE.

Formula.—Listerine is the essential antiseptic constituent of Thyme, Eucalyptus, Baptisia, Gaultheria and Mentha Arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzo-boracic Acid.

Dose.—Internally: One teaspoonful three or more times a day (as indicated), either full strength, or diluted, as necessary for varied conditions.

LISTERINE is a well-proven antiseptic agent—an antizymotic—especially adapted to internal use, and to make and maintain surgical cleanliness—asepsis—in the treatment of all parts of the human body, whether by spray, irrigation, atomization, or simple local application, and therefore characterized by its particular adaptability to the field of

PREVENTIVE MEDICINE—INDIVIDUAL PROPHYLAXIS.

Physicians interested in LISTERINE will please send us their address, and receive by return mail our new and complete pamphlet of 36 quarto pages, embodying:

A TABULATED EXHIBIT of the action of LISTERINE upon inert Laboratory Compounds;

FULL AND EXHAUSTIVE REPORTS and clinical observations from all sources, confirming the utility of LISTERINE as a General Antiseptic for both internal and external use; and particularly

MICROSCOPIC OBSERVATIONS, showing the comparative value and availability of various antiseptics in the treatment of Diseases of the Oral Cavity, by W. D. MILLER, A.B., Ph.D., D.D.S., Professor of Operative and Clinical Dentistry, University of Berlin, from whose deductions LISTERINE appears to be the most acceptable prophylactic for the care and preservation of the teeth.

DISEASES OF THE URIC ACID DIATHESIS.

LAMBERT'S

LITHIATED HYDRANGEA.

KIDNEY ALTERATIVE—ANTI-LITHIC.

Formula.—Each fluid drachm of "Lithiated Hydrangea" represents thirty grains of FRESH HYDRANGEA and three grains of CHEMICALLY PURE Benzo-Salicylate of Lythia. Prepared by our improved process of osmosis, it is INVARIABLY of DEFINITE and UNIFORM therapeutic strength, and hence can be depended on in clinical practice.

Dose.—One or two teaspoonfuls four times a day (preferably between meals.)

Urinary Calculus, Gout, Rheumatism, Bright's Disease, Diabetes, Cystitis,
Hæmaturia, Albuminuria, and Vesical Irritations generally.

WE have had prepared for the convenience of Physicians Dietetic Notes, suggesting the articles of food to be allowed or prohibited in several of these diseases.

These Dietetic Notes have been bound in the form of small perforated slips for Physicians to distribute to their patients. Mailed gratis upon request, together with our latest compilation of case reports and clinical observations, bearing upon the treatment of this class of diseases.

LAMBERT PHARMACAL COMPANY,

116 Olive Street, Saint Louis.

RHEUMATISM.

DIETETIC NOTE.—A fruit and vegetable diet is most favorable for patients with chronic rheumatic troubles.

Allowed.—Beef and mutton in moderation, with horse-radish as a relish; fish and eggs, green vegetables and fruit, especially lemons. The skimmed milk diet has been advocated by some authors.

Avoid.—Starchy and saccharine food; all malt liquors, wines and coffee.

THE
AMERICAN MEDICAL DIGEST

ISSUED IN MONTHLY PARTS.

MARCH 15, 1889.

A DIGEST OF CURRENT MEDICAL LITERATURE,
ABSTRACTS AND REVIEWS; IN THREE PARTS:
MEDICINE,—SURGERY,—DISEASES OF
WOMEN AND CHILDREN,
AND OBSTETRICS.

PART I.
MEDICINE.

THE NEW HYPNOTIC SULFONAL-BAYER.

SULFONAL was discovered by Prof. Engen A. Baumann, of Freiburg University, and was first prepared by the Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld.

SULFONAL (Diethylsulfondimethylmethan) is in the form of colorless prisms, odorless and tasteless, melting at 125.5° C. (258° F.) and has the composition $(C_2H_5)_2C=CH_2SO_2$. It is slightly soluble in cold water, but easily soluble in hot water or alcohol.

SULFONAL was first examined as to its physiological and pathological effects by Prof. A. Kast, of Freiburg University, and its hypnotic action was discovered and studied by him.

Since then Sulfonal has been the subject of numerous trials and experiments by many eminent and experienced physicians. Their testimony is unanimously favorable, and the conclusions reached by them are as follows:

SULFONAL is a prompt and reliable hypnotic which in proper doses produces quiet, natural sleep, lasting a number of hours.

SULFONAL has no unfavorable effects on the heart and the circulation, nor on the temperature, the pulse, or the respiration.

SULFONAL produces no disagreeable secondary symptoms; the patients with very few exceptions awake from their sleep feeling strong and greatly refreshed.

SULFONAL does not interfere with the process of digestion.

SULFONAL is a hypnotic, and not a narcotic; it acts by giving rest to the cells of the cerebral cortex, thereby causing sleep.

SULFONAL does not create an unconquerable desire for its repeated use; there is no danger of a Sulfonal-habit. Neither is it necessary to increase the dose after long-continued use.

SULFONAL is best administered at supper time, dissolved in hot liquids, *e. g.*, a bowl of soup or broth, a cup of milk, tea, coffee, cocoa, etc.

These points will be found to be fully exhibited in the series of contributions contained in our pamphlet, which will be mailed on application.

SULFONAL-BAYER is supplied by us in half-ounce and one-ounce vials.

We prepare 5-grain and 15-grain Tablets of Sulfonal-Bayer. The Tablet form is admirably adapted to the purpose of administering this drug, as when they are placed in the liquids, they disintegrate and are thus received into the system.

We also put up Sulfonal-Bayer in the form of our Soluble Pills, containing five grains each.

THE NEW ANTIPYRETIC PHENACETINE-BAYER.

Phenacetine-Bayer (Para-Acetylbenetidine) is a white, glossy, crystalline powder, perfectly tasteless, melting at 135° C. = 275° F. and has the composition C_8H_9NO , $\begin{matrix} O_2C_6H_4 \\ | \\ NH(CO-CH_3) \end{matrix}$.

It is slightly soluble in water, a little more soluble in glycerine, but most freely in alcohol.

Phenacetine-Bayer was first prepared by the Farbenfabriken, formerly Friedr. Bayer & Co., Elberfeld, and is of absolute purity and uniform quality.

Summarizing the superiority of Phenacetine-Bayer over other antipyretics and antineuralgics, the following conclusions are formed.

1. Phenacetine-Bayer is an efficacious antipyretic.
2. It does not develop any disagreeable or noxious after effects.
3. The dose required is half that of Antipyrine.
4. It is perfectly tasteless.
5. On account of its innocuousness and tastelessness, it is a valuable antipyretic both in adults and in children.
6. Phenacetine-Bayer is an important antineuralgic; its effect is more energetic than that of Antipyrine and does not cause lassitude or any other disagreeable symptoms.

Our Pamphlet on Phenacetine-Bayer, containing the valuable testimony of eminent physicians will be mailed on application.

We offer Phenacetine-Bayer in one-ounce vials, or in the form of our Soluble Pills of the strength of two and four grains to each pill.

W. H. SCHIEFFELIN & CO.,
170 & 172 WILLIAM STREET, NEW YORK,

Sole Licensees and Sole Agents for the United States.

Please mention the MEDICAL DIGEST.

CONSTITUTIONAL DISEASES.

On Corpulence, Especially its Treatment by a Pure Milk Diet.

DR. GEORGE H. ROHÉ, in an interesting article published recently in the *Maryland Medical Journal*, says:

Pure unskimmed cow's milk contains the different food-stuffs essential for perfect nutrition in nearly the proportion required. In carbo-hydrates it is deficient, and for this reason is especially applicable to a dietary in which easily oxidizable or carbonaceous foods should be below the normal. The composition of milk is tolerably regular, it is easily digested and generally well assimilated, and the quantity necessary for the nutrition of an individual is easily calculated. In order to keep the nutrition of an individual at the normal standard upon milk diet, a very large quantity would be required, *i. e.*, nearly three quarts of milk to supply the requisite proteids, while nearly four quarts would be necessary to supply the requisite proportion of carbo-hydrates and fats. Such large quantities could not be taken without repugnance, and would probably soon overwhelm the digestive and assimilative powers of the organism.

As it is desirable, however, in the dietary of corpulence to reduce the carbo-hydrates especially, and as a moderate reduction of proteids is also of advantage, it is evident that a milk diet, if practicable, would be the most desirable method of treating this condition.

The advocates of the milk diet in various diseases, as Karell, Pécholier, Doukin and others, state that from three to four pints of milk can be taken and assimilated daily. This quantity would not be sufficient to supply the proteid or carbo-hydrate expenditure of the body even at rest, and hence per-

sons of average weight and in health should theoretically lose weight on a sole diet of cow's milk. Certain observations placed on record by Dr. Weir Mitchell and F. A. Hoffman show that loss of weight is one of the characteristic manifestations of a pure milk diet. Practical observation then agrees with physiological expectation.

With reference to the favorable effect of a pure milk diet in the reduction of excessive corpulence, I have only two observations to register, but these are such striking examples that they will probably suffice to show the value of this method, especially if the more rational one of active exercise cannot, for various reasons, be enforced.

Several years ago, while on a visit to an esteemed medical friend in the West, I was informed by the wife of my host, a charming woman, but whose embonpoint had encroached somewhat upon a graceful figure, that she could at any time reduce her weight by restricting herself to a milk diet; in fact, that the loss of weight under this diet was nearly one pound per day. Surprised by this statement, I began to think over the matter, and soon found the explanation in the physiological facts given above. Recently I had an opportunity of watching the effects of the method in a patient under my observation, and the result entirely confirmed my expectations. The patient was a lady, who since her marriage, four years ago, had been growing steadily more corpulent. She occasionally suffered from symptoms of nervous depression, and had several mild hysterical attacks. She suffered from amenorrhea, and had never been pregnant. I frequently warned her against the consequences of an excessive accumulation of fat, urging her to take active exercise in the form of walking, to restrict her diet, especially

the carbo-hydrates, and to take frequent cold baths. My predictions of possible evil and suggestions for averting the same were received with equanimity and—things went on as usual.

Finally, the long indulgence eventuated in a particularly obstinate attack of dyspepsia with troublesome nervous symptoms. The measures usually successful in my hands in such cases—alkalies, nux vomica, quinine, calomel, phosphate of soda, pepsine and coca—were all tried without avail. Restriction and regulation of diet, if the directions I gave were followed, seemed to have no good effect. I then resolved to restrict the patient to an exclusive diet of unskimmed milk. Up to this time she had lost no weight; in fact, she seemed to gain under the enforced rest.

Being promised sure relief from her dyspeptic symptoms, she agreed to carry out faithfully the milk diet which I prescribed, to the exclusion of all medicine.

From the first day this was adopted the dyspeptic symptoms began to improve. For two weeks nothing but milk was taken by the patient. By that time the dyspepsia had disappeared, the nervous symptoms had subsided, and the corpulent condition of the body had been much modified. The loss in weight amounted to at least eighteen pounds. About the time the milk diet was modified an attack of constipation which required an active purgative to overcome brought on a nervous attack, which I feared would prove an unfavorable complication. She soon recovered, however, and is now entirely restored.

In leaving the exclusive milk diet, I allowed the patient to return only gradually to her regular fare. At first a few crackers and raw oysters were

allowed, then stewed oysters, then beef *à la mode*, and finally the usual allowance found on the family table. She rapidly gained strength, and began to regain the lost weight, but urgent representations of the danger of unrestrained accumulation of fat have induced her to take more active exercise, and her muscles are becoming harder and the heart beat stronger. In spite of a plumpness a little too pronounced to be called graceful, she now presents an appearance of health which is not only gratifying to her friends and herself, but, paradoxical as it may sound, to her medical adviser also.

The best method of giving the milk diet is to begin with frequent small doses. A wine-glassful every two hours may in a few days be increased to three, four or six ounces at the same intervals, or larger doses at longer periods.

It is necessary to guard against the constipation liable to follow the milk diet. Small doses of calomel (1-6 grain every 2 hours) for 6 to 8 doses, or a glass of some purgative water like Friedrichshall or Hunyadi-Janos will prevent any unpleasant consequences from this tendency. The addition of phosphate of soda to the milk in 5 to 10 grain doses will also counteract the tendency to constipation, while making the milk itself more palatable. The milk may also be mixed with Selters or other carbonated water, to make it more agreeable to the taste.

While I am firmly convinced that the only true physiological way of reducing excessive fat is to burn it up by active exercise, I fully recognize the impracticability or inexpediency of enforcing this rational regimen in some cases. In such, no more satisfactory method of treating this often annoying condition is available than a pure milk diet, which I commend to your attention.

What to Eat.—Suggestions for the Effective Repair of Brain Waste.

A PHYSICIAN, writing on the food necessary to give strength and sustenance, says that if a person uses up his brain faster than he makes it, he soon becomes nervous and irritable. If he does not assimilate enough food to supply its demands his mind is sure to become weak. The healthiest and strongest individuals, even, should eat a far greater proportion of meat than of vegetable food.

Beef should be taken as the standard meat. It answers every purpose of the system. Veal and pork are not as easily digested. Pork, so far as its composition goes, is an excellent food for nervous persons, but it is not readily digested. Yet, in the army, we used to think nothing better for the wounded men than bacon. As a rule, salt meat is not adapted to the requirements of the nervous individual, as nutritious juices to a great extent go into the brine. The flesh of the wild birds is more tender and more readily digested than that of domestic ones. This is accounted for by the greater amount of exercise they take, thereby renewing their flesh more rapidly and making it younger than that of birds which lead a more quiet life. This is a suggestion that might be of benefit to women of sedentary habits, who are desirous of prolonging an appearance of youth. Fish of all kinds is a good food for the nervously inclined. Raw eggs, contrary to the general opinion, are not as digestible as those that have been cooked.

A notion has been prevalent that many persons injure their digestion by eating too much. The fact is that most people don't eat enough. There are more people killed every year by insufficiency of nourishment than by over-

loading their stomachs. Many of those who do eat a sufficient quantity are prevented from disease by digesting enough for the economy of their systems. The very first thing for any one to do who has exhausted himself by mental work or who has been born weak and irritable, is to furnish his brain with sufficient nourishment either to repair the damage it has sustained, or to build it into a strong healthy condition. People in this condition usually suffer from nervous dyspepsia. Their stomachs are unable to perform the labor of assimilation. Owing to the deficient nerve power of the individual the food lies in the stomach unacted upon by the gastric juice, because there is none or the quantity is insufficient to have any power. Food, instead of helping to renew the body, and the nervous system with the rest, undergoes fermentation, and the body and brain it should nourish may starve. The person is in a worse state than if the food had not been taken, for the fermentation generates acids and gas.

Nervous individuals may derive all the fat they need from sugar and starch. It is better, however, for those with weak digestive organs, or whose nerves are in a highly sensitive state, to get it from the animal kingdom, than compel their enfeebled stomachs, intestines and pancreas, to create it out of these articles. Good bread, sweet butter and meat are the best foods for the nerves. People troubled with insomnia, nervous starting from sleep and sensations of falling, can often be cured by limiting themselves to a diet of milk alone for a time. An adult should take a pint for a meal, and take four meals daily.

People with weakened nerves require, usually, a larger quantity of water than those whose brains and nerves are strong. It aids in the digestion of food

by making it soluble, and seems to have a direct tonic effect. With proper eating and drinking we should have fewer broken down, nervous wrecks, and far more vigorous intellects. The present human species cannot eliminate flesh from its food and amount to a row of pins. The fancy that nothing but vegetables should be eaten is apt to overtake every one somewhere in life. It is due to some disorganization, and passes away with the disturbance that created it.—*American Analyst*.

Notes on Diagnosis.

DR. W. R. LOWMAN, in an article published in the *Medical Bulletin*, gives the following diagnostic points:

Study pulse carefully. May range normally from 50 to 100. Male usually 72 per minute; female, 76. Increase per 1° rise temp: 10 beats per minute. The pulse may be quick in stroke yet in beats slow or infrequent; full, round, and large; empty, small, or thread-like; strong or weak in impulse; hard, whipcord, or soft, compressible; wiry, like wire striking the finger; irregular, fast and slow alternately; intermittent, one or more beats lost; dicrotic, double stroked; asynchronous.

Normal pulse in sphygmographic curves.

Full and strong in inflammatory fevers and hypertrophy of heart.

Slow, hard, and strong, pulse of laborer, boxer, etc.

Slow, strained, and strong pulse of meningeal derangement, but not a sign in the powerful.

Frequent in pregnancy.

Slow few hours after labor.

Weak and slow in dilatation of heart.

Very frequent in some specific fevers; sometimes from weakness, as in diphtheria, therefore stimulants will often bring down.

Quick and sometimes hard and sharp in abdominal or rheumatic inflammations.

Frequent, hard, sharp, and wiry in gastric or inflammation of any organ below the diaphragm.

Small, soft, and quick in aortic stenosis or dilatation of veins.

Small and slow, extreme debility.

Irregular, and often quick, latter stages of pericarditis.

Irregular, often only sign of endocarditis.

Intermittent, angina pectoris, cardiac, and brain diseases, but sometimes normal.

Dicrotic, grave, approaching dissolution.

Small and irregular, mitral affections.

High and fast, aortic insufficiency.

Tardy, senile.

Asynchronous pulses from asynchronous contraction of sides of heart, double sound but no double wave for each, symmetrical. Unilateral is diagnostic of aneurism.

Notes on the Tongue.—Always examine the tongue—the patient expects it, and it is of times a good index. If of a smooth, pale, pinkish, moist, and elastic, resistive appearance all is well. As has been pointed out, if it is furred and of a dull, whitish hue, there is either in the organ itself “a congested or hyperacid condition” or asthenic condition of system with a local or other cause in proximity; but if redness, with fur, there is a hyperalkaline or inflammatory state.

Fur indicates epithelialization, a hyperproduction, or non-removal by friction, as in fever. We have increased circulation and lack of attrition by want of appetite and consequent absence of mastication. Infants' tongues are white at the back part from lack of attrition.

White furred denotes non-attribution, oral inflammation, croup, pneumonia, measles, etc.

Yellow furred indicates hepatic derangement with retention of bile, fevers, etc.

Red, long, and pointed shows inflammation of stomach, bowels, etc., diarrhea, etc.

Very red in scarlet fever (infant's strawberry), chronic diarrhea.

Clean or slightly coated in yellow fever.

Dry, cracked, scaly, and brown is seen in the latter stages of a long continued specific fever, like typhoid, or in rapid specific fever of high grade, as typhus.

Ridges, fissures, or sulci characterize the hepatic disorders so common to the South and malarial regions.

Cracked edges, derangement of kidney.

Red, pointed, and dry denotes nerve irritation.

Broad and porous denotes imperfect elimination and muscular weakness.

Flabby and full denotes blood poverty and debility.

Dry in high temperature, profuse diaphoresis, diarrhea or other exhausting discharges.

Coated and yellow in cancer of stomach.

Clean and reddish in ulcer of stomach.

Medical Jurisprudence and Inebriety.

DR. T. D. CROTHERS (*Journal of Inebriety*) concludes a discussion of this question thus :

1. The legal treatment of insanity has changed in obedience to a more accurate knowledge of the brain and its diseases.

2. The legal treatment of inebriety is unchanged to-day. Although it occupies two-thirds of the time of courts,

all teachings of science and a larger knowledge of the inebriate and his malady are ignored.

3. The ruinous error of punishment by fines and imprisonment of inebriety, and petty crime associated with it, which notoriously increases and perpetuates the inebriate and criminal, is a fact demonstrable in every community.

4. Thus public opinion, through mediæval theories and laws, are training and preparing a class of inebriates who first commit petty, then capital crime, with a certainty which can almost be predicted.

5. The death penalty for such crime utterly fails for the same reason. The execution of any number of this class simply opens the door for an army already prepared and trained to take their places.

6. From a scientific study of these cases, it is clearly apparent that they are diseased and incapacitated to act sanely. Alcohol has palsied the brain and made them madmen. The very fact of continuous use of alcohol is evidence of mental impairment and unreasoning act and thought.

7. To hold such men accountable for their acts, and by punishment expect to deter them from further crime, and by such punishment check others from similar crime, is an error which both scientific teaching and experience point out.

8. The object of the State, through the law, is to protect society and the individual ; but if the execution of the law breaker fails to accomplish this end, the laws are wrong.

9. The unfounded fear that the plea of insanity in crime, and the failure to punish, is an encouragement for further crime, is flatly contradicted by statistics.

10. Among the mentally defective,

the insane, and inebriates, the death penalty is followed by an increase rather than a diminution of crime.

11. The inebriate should never be hung for crime committed while under the influence of alcohol.

12. This method of punishment is never deterrent, but furnishes an attraction for other inebriates who commit similar crime in the same way, following some law of mental contagion.

13. The inebriate murderer should be confined the rest of his life in a military work-house hospital. He should be under the care of others as incapacitated to enjoy liberty and incompetent to direct his thoughts or acts.

14. A change of public sentiment and law is demanded, and a readjustment of theory and practice called for. The criminal inebriate occupies a very large space among the armies of the defective who threaten society to-day, and his care and treatment must be based on accurate knowledge, not theory.

15. Inebriate murderers should never be placed on public trial, where the details of the crime are made prominent or the farcical questions of sanity are publicly tested. They should be made the subject of private inquiry, and placed quietly in a work-house hospital, buried away from all knowledge or observation of the world.

16. The contagion of the crime and punishment would be avoided, and his services might repair some of the losses to society and the world.

Malaria—Its Micro-Organisms.

DR. M. B. JAMES (*Medical Record*) concludes a study of this subject thus:

1. The presence of the phenomena grouped under the name hæmatözoon of malaria in the blood of persons suffering from malarial disease

2. The presence of crescentic bodies, only in chronic cases.

3. The presence of the segmenting forms only immediately before and during the chill.

4. The disappearance of all but the crescentic forms after the administration of large doses of quinine.

5. The possibility of transferring malarial disease from person to person by intravenous injection of malarial blood.

But we must at present recognize as hypothetical though probable.

1. An etiological relation between the appearances described in the blood and the disease itself.

2. The absence of these appearances from the blood in all other conditions.

3. The assumption that the bodies described are one and the same organism.

4. The assumption that any of the forms excepting the flagellated bodies are independent organisms.

Beer Compared with other Alcohols.

FOR some years a decided inclination has been apparent all over the country to give up the use of whisky and other strong alcohols, using as a substitute beer and other compounds. This is evidently founded on the idea that beer is not harmful, and contains a large amount of nutriment; also that bitters may have some medical quality which will neutralize the alcohol which it conceals, etc. These theories are without confirmation in the observation of physicians.

The use of beer is found to produce a species of degeneration of all the organs. Profound and deceptive fatty deposits, diminished circulation, conditions of congestion, and perversion of functional activities, local inflammations of both liver and kidneys are

constantly present. Intellectually a stupor amounting almost to paralysis arrests the reason, changing all the higher faculties into a mere animalism, sensual, selfish, sluggish, varied only with paroxysms of anger that are senseless and brutal.

In appearance, the beer drinker may be the picture of health; but in reality he is most incapable of resisting disease. A slight injury, a severe cold, or a shock to the body or mind, will commonly provoke acute disease, ending fatally. Compared with inebriates who use different kinds of alcohol, he is more incurable, and more generally diseased. The constant use of beer every day gives the system no recuperation, but steadily lowers the vital forces. It is our observation that beer drinking in this country produces the very lowest kind of inebriety, closely allied to criminal insanity. The most dangerous class of ruffians in our large cities are beer drinkers.

Recourse to beer as a substitute for other forms of alcohol merely increases the danger.—*Scientific American*.

Baths in Typhoid Fever.

In speaking of his five years' experience in the treatment of typhoid fever, Dr. HUMBERT MOLLIÈRE, mentions a number of methods of reducing the temperature (*Lyon Médical*). He states that he has, for the time being, concluded to reject antipyrine in the treatment of typhoid fever in adults; and is in favor of the systematic application of cold water in all cases, from the beginning. For him there is but a slight restriction upon this treatment by means of baths in those cases where a marked contra-indication exists and in these it is large cold baths rather than the cold water, which should be avoided.—*St. Louis Medical & Surgical Journal*.

DISEASES OF THE NERVOUS SYSTEM.

Case of Subacute General Anterior Spinal Paralysis.

MM. PITRES and VAILLARD report in the *Progrès Médical* a typical case of the affection described by Duchenne under this title. The patient, a robust man 43 years old, took a violent chill, which was followed by shivering fits, a feeling of general malaise, colic and tenesmus, with slight diarrhea. A month later, another attack of the same kind came on, with extreme feebleness; and six weeks after the onset of the illness, he came under observation, complaining of general weakness. The muscular feebleness was very marked. Two days after admission, paralysis, without affection of sensation, came on in the right shoulder, and shortly afterward in the left. About a week later, the paralysis had extended to the arms, and to the muscles on the posterior aspect of the forearms. The patient now complained of great weakness in the legs; was barely able to stand, and could not walk at all. Seven weeks after admission, all motor power in the four limbs was completely lost. The muscles now began to waste, and to lose their excitability to the Faradic current in the order in which they had been involved in the paralysis. There was no affection of sensation of the sphincters, nor of the organs of special sense, and no fever. A month later, there was œdema of hands and of the lower extremities, but no albuminuria. Slight signs of bulbar paralysis now showed themselves, with nocturnal delirium. Two months afterward, the patient was in the same condition, except that he was beginning to gain power in the right arm: at this time he died of an attack of lobar pneumonia.

At the autopsy the brain and spinal cord were normal ; the only abnormality found, on microscopic examination of the spinal cord, was a slight degree of thickening of the neuroglia in the lateral columns and in the columns of Goll. The peripheral nerves, both in the large nerve-trunks and in their finest ramifications, showed considerable morbid changes of the form described as "degenerative neuritis," differing in degree only, and not in the nature of the pathological alterations, in different regions. Briefly, the changes consisted in breaking up or segmentation of the myelin sheaths (early stage), followed by complete atrophy, leaving empty nerve-sheaths mixed with finely varicose fibrils. The proportion of healthy nerve-fibres mixed with the atrophied fibrils in the nerve-trunks was exceedingly small. These lesions affected without exception the nerve-trunks and their branches in the four limbs. The anterior roots of the spinal nerves were much less altered. Individual nerve-fibres were found to be affected in the same way as the foregoing ; but there were few diseased nerve-fibres, and these occurred individually, scattered amongst the very much larger proportion of healthy fibres, whilst here the morbid process never destroyed whole bundles of nerve-tubes as it did in the case of the peripheral nerves.

The symptoms of this affection resemble those of Landry's paralysis ; but differ in the slowness of onset and progress. Duchenne thought that the seat of the lesion would be found in the motor cells of the anterior cornua of the spinal cord. The case is interesting, since it shows that in this undoubted instance of the affection in question, the peripheral nerves were affected almost alone, the slight change

found in the spinal cord being unimportant. It also shows that profound alterations in the mixed nerves may cause only general motor paralysis without any affection of sensation. The authors give a brief account of the cases of this rare affection hitherto published.—*Bristol Medico-Chirurg. Journal.*

Clinical Value of the Superficial Spinal Reflexes.

At a meeting of the Bradford Medico-Chirurgical Society, Dr. HERBERT MAJOR read a paper on the clinical value of the superficial spinal reflexes.

Brief reference was first made to the reflex functions of the cord ; the dependence of these reflexes on the integrity of the reflex loops consisting of afferent sensory fibres, gray substance of the cord, and efferent motor fibres ; the purely spinal nature of the reactions ; the frequent diffusion of the reflex excitations both in health and, especially, under certain morbid conditions in which the reflexes are exaggerated ; the connections of the reflex loops on either side of the cord with the conducting tracts to and from the brain ; and the normally greater activity of the reflexes in infancy and childhood than in adults.

The series of cutaneous reflexes as given by Gowers and their respective reflex loops were then alluded to, attention being drawn to the statement of Gowers as to the possible absence in health of certain of the reflexes, especially the gluteal, lumbar, and sometimes the cremasteric ; so that, he said, it is not to be inferred, from the absence of such reflexes alone, that the reflex pathway through the cord is impaired.

Reference was next made to the views of other neurologists with respect to the relative constancy of these reflexes in health, as showing, probably, a further degree of normal irregularity in their

occurrence than had been allowed by Gowers ; and the opinion was expressed that such further limitations are necessary. The importance of a correct and fully adequate estimate of possible normal variations is evident. The modifications of the cutaneous reflexes in disorders of the nervous system were then considered. The facts were recalled that in cerebral paralysis the reflexes are lowered on the paralyzed side, probably as the result of irritation in the affected hemisphere of the brain ; that they are liable to be excessive in diseases of the motor paths from the brain which diminish the cerebral control ; and that they are lowered or abolished in affections involving impairment or destruction of any portion of the reflex loops, and consequent interruption of the reflex pathway.

With respect to the reliableness of the superficial reflexes in diagnosis, stress was laid on the possible occurrence of disease of the cord outside the reflex loops, and, therefore, unindicated by reflex changes ; on the frequent normal absence of the reflexes in the adult ; in the occurrence of impairment only in reflexes, slight in degree possibly, and difficult of appreciation ; and in the fact that, given an altered state of the reflex, the position of the lesion in the course of the reflex loops remains to be determined. On such grounds it was urged that no attempt should be made, in any case, to rely solely or mainly on any apparent irregularities in these reflexes, but only to utilize them with, and in subordination to, other evidence. Possibly their practical value in diagnosis, he said, has been over estimated by others ; but if this precaution is taken, and the precise significance of the reflexes duly borne in mind, they would be found of assistance in a certain proportion of cases ; or,

failing to assist, they would not lead into error.—*Medical Press and Circular.*

Clinical Experiences with Sulphonal.

MR. CONOLLY NORMAN, Medical Superintendent of the Richmond Asylum, contributes an interesting paper on sulphonal to the *Dublin Journal of Medical Science*. He has employed it in twenty-two cases, and summarizes his experiences as follows :

1. Out of the twenty-two persons observed, in only two were any bad results noticed. These were specially unfavorable cases, and cases in which other sedatives had failed.
2. In no case was gastric or intestinal trouble observed.
3. In eight cases refusal of food, or a tendency thereto existed. This was overcome, and the appetite seemed to improve under the use of sulphonal.
4. In six cases masturbation and tendency to sexual trouble existed. The drug appeared to lessen the tendency to self-abuse and erotic excitement.
5. In some recurrent cases it appeared to check or shorten the attack.
6. Out of the limited number of cases treated the majority happened to be melancholiacs, but the drug seems to exercise a hypnotic and sedative effect in various forms of insanity.
7. No patient complained of the drug, or refused it for other reasons than delusional ones.
8. Sleep produced appeared to be natural, refreshing, and undisturbed by dreams.

In comparing sulphonal with other medicines having similar effects, it is needless to refer to the products of opium, or to chloral. Of the more modern drugs paraldehyde is, perhaps, the most used. Its great disadvantage is that it requires constant increase in the dose. As far as Mr. Norman is

able to judge, this does not apply to sulphonal. Paraldehyde long continued, is also stated by Fröhner to cause destructive changes in the blood corpuscles, while Krafft-Ebing points out that it occasionally produces symptoms resembling alcoholism. Urethan, to which Mr. Norman has given a pretty extensive trial, he declares to be uncertain, and of no great strength. Amylene hydrate is uncertain and dangerous, as Schlöss's cases prove. (*Jarhbuch der Psych.*) Methylal is liable to the same reproaches. Hypnone, he says, is undoubtedly of some value; he once thought highly of it, but has found it uncertain, and it appears indisputable that patients soon become habituated to its use. All the three last named drugs, he says, are so abominable in taste and smell that it is almost impossible to get patients to swallow them, and, as might be expected from this, they all upset the stomach.

The advantages of sulphonal he states to be: 1. It is absolutely free from smell. 2. Otto states that it leaves on the mouth a faint bitter after taste. This Mr. Norman noticed, but it is very slight, and patients always say it is tasteless. 3. It produced, in his cases, no gastric derangement, and no troublesome head symptoms; it does not affect the appetite. 4. The sleep which it produces is relatively "natural."

Its disadvantages are: 1. That it is bulky and practically insoluble, therefore difficult to administer; and that, perhaps owing to its insolubility. 2. It is slow in action. A further practical disadvantage hitherto has been its price.—*Medical and Surgical Reporter.*

DIGESTIVE TRACT.

Infectious Jaundice.

DR. W. P. VASSILIEFF contributes to the *Ejenedelnaya Klinicheskaya Gazeta*,

of St. Petersburg, an interesting article on "Infectious Jaundice," founded on observations made in the Alexandrovski Military Hospital in 1883.

There were eleven cases, at first somewhat puzzling, of an acute infectious disease, which has recently been described under several different names,—typhus hépatique, nephro-typhus biliosus, typhus obortivus cum ictero et nephritide, morbus sui generis, etc. This disease is usually met with as a sporadic affection. There is fever very often at the beginning, then enlargement of the liver and spleen, jaundice and kidney trouble. The disease usually terminates favorably. From the histories of the eleven cases given by the author, it is clear that it is an acute general affection, which commences suddenly with a chill. In some patients nausea, and even vomiting, occurred, after which there were general debility and severe pains in some of the joints, often also in the muscles, especially those of the lower extremities; the appetite was usually bad at the beginning; sometimes there was very great thirst; the patients generally slept badly, and frequently suffered from delirium. When the cases were seen early the temperature was found to be high, the pulse soft and rapid; the tongue was moist and slightly coated; the skin hot and dry. At the beginning there were usually observed enlargement and tenderness of the liver and spleen. Albumen and sometimes casts were found in the urine; also, when there was jaundice, bile pigment. The lungs sometimes were affected slightly (with bronchitis); in two cases pleurisy occurred. The bowels were usually constipated at the beginning. Later on they were sometimes relaxed, the motions generally being colorless. Frequently at the commencement, and sometimes throughout

the whole illness, there were attacks of epistaxis; occasionally also herpes labialis occurred. No micro-organisms could be detected in the blood. The patients, especially when they were admitted in an early stage of the disease, gave the impression of great prostration, but after some days this passed away, and they began to get better. The temperature generally fell about the eighth day, sometimes as early as the seventh, at others as late as the eleventh; sometimes there was a second rise of temperature, which did not usually appear to affect the patient much. Although the disease was of such short duration, the patients after the temperature had fallen appeared to be extremely weak, and regained strength somewhat slowly.

Although Dr. Vassilieff has only recorded eleven typical cases, he has from time to time had an opportunity of observing others of a similar character in the hospital. One of these proved fatal; at the post-mortem examination extravasations of blood were found on the serous and mucous membranes, and slough of the mucous membrane of the pharynx.

Thirty-six other cases have been described by Landouzy, Mathieu, Weil, Goldschmidt, Wagner, Roth, Aufrecht, Fiedler, and Haas; at least, Dr. Vassilieff has come to the conclusion that his cases and theirs are all examples of the same affection. This disease is met with chiefly in the summer, and nearly always affects workingmen, only three cases being on record where the patients were women; most of those affected were between sixteen and twenty-five years of age. It occurs in different parts of Europe in the form of a sporadic, acute, feverish affection, with severe nervous symptoms, and with enlargement of the liver and spleen,

functional kidney disturbance, jaundice, and pains in various groups of muscles. In Dr. Vassilieff's opinion, it bears most resemblance to the bilious typhus met with in Egypt and Smyrna, described by Drs. Kartulis and Diamantopulos, and it appears to be *sui generis*, differing from recurrent bilious typhus.—*Lancet*.

Treatment and Prophylaxis of Cholera.

THE Paris correspondent of the *Wiener Med. Presse*, states that at a recent meeting of the Academy of Sciences, Dr. A. IVERT made a very practical and interesting communication upon the treatment and prophylaxis of cholera. During the expedition to Tonking, Ivert had an opportunity to observe a frightful epidemic of cholera, without being able to influence the disease with remedies. In April, 1887, he assumed the direction of the Nam-Dink hospital, and decided, from the bacillary nature of the disease, to try the effect of corrosive sublimate. He began with small doses, and observed an immediate improvement in the local condition. When the dose was increased, the diarrhea diminished and the stools became semi-solid. In no case did vomiting occur. This is in such contrast with the symptoms produced by corrosive sublimate in healthy persons, that Ivert assumes that the drug has in cholera a specific action upon the bacilli, or upon the poison developed by them. The result of his experiment was so encouraging that Ivert placed upon this treatment all the patients with cholera who came under his observation from May 1 to June 30. The cases, he says, may be divided into three groups.

I. Pronounced cases of cholera, which present all the classical symptoms of the disease, that is to say, cases in which the disease occurs suddenly,

and is announced by vomiting, violent colicky pains, numerous rice-water-like evacuations, violent cramps, cyanosis, an algid state, and anuria, to which symptoms asphyxia is sometimes added—cases which tend to death.

2. Cases in which the same symptoms as those noted in the first group are present, but the course is not so rapid—cholera sicca.

3. Cases in the first stage of the disease.

The number of cases treated by Ivert was 45. Of those belonging to the first group, 3 Europeans recovered and one died; and 8 Anamites recovered and 7 died. In the second group, 6 Europeans recovered and 1 died. In the third group, 3 Europeans recovered and none died; 16 Anamites recovered and none died. Total for the three groups, 36 recoveries and 9 deaths.

Ivert employed also symptomatic treatment—hot bottles—injections of ether when there was great adynamia, inunctions of camphor or turpentine for the cramps, tea, coffee, etc.

Prophylactic treatment was instituted in all affections which predispose to cholera. In no instance did a case of cholera develop in the hospital.

As a prophylactic Ivert prescribes: *Liquoris Van Swieten* ℥ cl to ccv; *rum f 3 i* to *f 3 i f 3 ii*; *opii pur. gtt. xx*; *aq. dest. f 3 ii*. *M. Tablespoonful a day.*

Liquor Van Swieten has the following formula: *Hydrarg. bichlor. gr. xvss*; *aq. destil. f 3 xxvi*; *alcoholis (80 per cent.) f 3 iii*.

DISEASES OF RESPIRATORY ORGANS.

A New Study of Lobar Pneumonia.

DR. T. E. SATTERTHWAITE read a paper with this title, which was based on an exhaustive examination of old

and new literature relating to the disease, and on fifty-six fatal cases occurring in the reader's own experience. He concluded that epidemics of pneumonia had occasionally occurred, but not often, and that they had followed either long continued cold winds or confinement in foul air. They varied with the locality. Thus in 1709, in France, an epidemic of pneumonia in Languedoc and Provence blended into severe influenza in England. The isolated cases of pneumonia were caused in some cases by prolonged exposure to cold, especially to cold winds and draughts, by impure air in other cases, but often by still other things of which we knew almost nothing. He recognized as separate types which presented both pathological and clinical differences: 1. Acute lobar pneumonia. 2. Secondary lobar pneumonia. 3. Embolic lobular pneumonia. 4. Bronchial lobular pneumonia. 5. The interstitial pneumonia of heart disease. The paper dealt with the first two of these varieties only. The first occupied a unique position in the catalogue of diseases, being unlike any known disease either in anatomy or symptoms. It should also be distinguished from the catarrhal phthisis of Niemeyer, known in some quarters as catarrhal pneumonia, from syphilitic pneumonia, from the interstitial pneumonia caused by the inhalation of foreign substances, and from hypostatic pneumonia due purely to chronic venous congestion. The term lobar pneumonia was to be preferred to croupous pneumonia.

In the reader's experience, acute lobar pneumonia was likely to begin with symptoms in the following order: 1. Pain, prostration, and cough. 2. A severe chill. 3. Nausea. 4. Rise of temperature to 103° or 104°. Pain in the limbs, headache, difficult breathing,

and an alteration in the usual ratio between the pulse and the respiration.

The chill might be overlooked from its occurring during sleep, or might be mistaken for an exposure to cold which existed only in the imagination. It was of exceedingly common occurrence. The cough might be absent in old people. The characteristic expectoration of pneumonia, ordinarily of a rusty or prune juice color, might in exceptional cases be red, black, green, or colorless. The sputum had three characteristic qualities—color, consistency and coalescence. It was sometimes absent, and always absent in very young children. A rusty colored sputum was occasionally met with in other diseases than pneumonia; thus, in naso-pharyngeal catarrh where there was hemorrhage, but without the other characteristic qualities. Acute laryngitis sometimes gave the characteristic sputum of pneumonia in every respect the color.

The reader had found acute renal disease present in thirty-six per cent. of his cases, and an exacerbation of a chronic kidney trouble in five per cent. He was convinced that examination, if it had always been made, would have shown higher percentages.

Among the earliest of the physical signs was a loss of elasticity in the chest-wall on percussion, as described by Grisolle, especially in the supraspinous and infraspinous fossæ. Much more important was the crepitant râle produced by fluid matter entering the vesicular substance of the lung, and it might almost be regarded as a characteristic of lobar pneumonia. It was, however, admitted in the best quarters that the crepitant râle occurred not only in œdema of the lungs and pulmonary apoplexy, but occasionally in the other types of pneumonia, in phthisis,

pulmonary syphilis, and even in bronchitis. The reader discussed the other physical signs, the prolonged expiration, the voice, the pain in the chest, the pulse and the respiration. Where the pulse was twice the normal, the respiration was frequently three times the normal in frequency. Delirium was especially common in alcoholic patients. The duration was usually between five and nine days. Any case for which a duration of over two weeks was claimed was to be looked upon with the gravest suspicion. Death was most frequent at the crisis, which occurred usually on the sixth day. Its immediate cause was usually heart failure, resulting either from overwork and exhaustion, or from the influence of the poisoned blood on the nerve-centres, or both. Of eighteen cases in his own experience, where noted, in eleven death came by heart failure, in five from anæmia, and in only one from respiratory stoppage.

Returning to the subject of the causation of pneumonia, the reader quoted various diverse opinions. Sturges had believed that cold, dry, penetrating winds caused the disease. Grisolle thought exposure to cold only an occasional cause, being recorded in a fourth of his cases only, and other observers were quoted who had recorded previous exposure in from one-fifth to one-half of their cases, while Ziemssen had been able to trace it in only ten out of one hundred and eighty-six cases, and Griesinger in but four out of two hundred and twelve. The speaker had found it ascribed in twenty-two per cent. of his cases, but, as Grisolle had observed, the initial chill may frequently have been mistaken for an exposure of the body. The epidemic form had often been traced to the confinement of many persons in a single room, thus to foul

air. It was frequently associated with diarrhea or dysentery. A certain number of cases could be set down as due to exposure. The causation of a considerable number was then unexplained. The connection specifically of any bacteria with pneumonia had not as yet been shown.

The mortality of lobar pneumonia varied greatly, in the opinion of the reader, with several factors; especially did it depend on age of the patient. It also changed with particular years, because the types of pneumonia varied from year to year. The same physician using the same method of treatment obtained different results in different years. Furthermore, each case of acute lobar pneumonia stood by itself. The lowest mortality had always followed the expectant plan of treatment. The causes of death obviously pointed to the direction in which the main efforts in treatment should be made. It was not then by reducing the temperature that real aid was to be given so much as by sustaining the heart and obviating renal disease. It had been found by post-mortems that the use of antipyretics not only weakened the heart, but had some unfavorable action on the kidneys.

Every case should be treated by itself, and indications met as they arose. Thus copious and repeated cuppings gave relief in sthenic cases, cold applications where the patient was less vigorous, large doses of mercury where there was lack of action in the liver, alcoholic stimulants where the heart was weak, and diaphoresis where the kidneys showed loss of normal action. The temperature of pneumonia he regarded as a symptom of disturbance, and not as an added danger.

Secondary lobar pneumonia was a disease that followed other diseases, and hence might be called consecutive. It

followed upon nephritis, alcoholism, phthisis, burns, and surgical operations. It was to be regarded as a subacute form, with its clinical signs often ill defined and its approach so insidious as often to escape ordinary observation. It differed from the acute lobar pneumonia in respect to the age of the individual, the apparent causation, the character of the pulse and respiration, the temperature, and the tendency to suppurative changes in the lung. Still it was often first recognized at the post mortem. The chill was very often absent or slight, and the pain in the side was not constant. The breathing might be easy, but the crepitant râle was usually heard. The temperature was, on an average, lower than in the acute form and had less relation to the severity of the disease. The pulse was slower. The most decided symptoms in the reader's experience were bronchial breathing and dullness. They had been present in seventy per cent. of his cases. The expectoration was apt to be scanty. He had noted it in a third only of his cases. Renal symptoms, however, were apt to be more acute than in primary pneumonia.—*N. Y. Medical Journal.*

DISEASES OF THE URINARY ORGANS.

Therapeutics of Bright's Disease.

THE Revue Générale de Clinique et de Thérapeutique gives the following summary of the therapeutics of Bright's disease.

Classic Regimen: Climatic precautions consist in avoiding humidity and rapid changes of temperature. In dietetics the patient is told to avoid highly spiced and irritant foods; avoid eggs, wines, liquors and beer, and to confine himself to the milk diet, either absolute or mixed.

Senator's Regimen : This permits the use of white meats, including pork, starchy and herbaceous foods, fruits, fats and milk. It also allows wine diluted with water. It forbids all red meats.

Semmola's Regimen : This consists in the observance of the foregoing rules, and as an internal remedy its author prescribes the following, to be taken daily : \mathcal{R} . Potassium iodide, grs. xvi; sodium phosphate, 3 ss; sodium chloride, 3 iss; water, O ij; mix and dissolve. This amount suffices for 24 hours and is to be taken at convenient intervals.

Bamberger's Regimen : This prescribes the rigid adherence to the milk diet, and assists it with tonics and iron. Its author recommends the following.

1. Pills of perchloride of iron after the following formula, from 3 to 6 to be taken during the 24 hours: \mathcal{R} . Perchloride of iron, 3 ss; marsh trefoil (*menyanthes trif.*) in powder, \mathfrak{D} iv; extract of taraxicum, sufficient. Mix and divide into 100 pills.

2. Pills of sulphate of iron. For these Bamberger prefers Wiethe's formula as follows: \mathcal{R} . Sulphate of iron, \mathfrak{D} iv; sodium bicarbonate, \mathfrak{D} iv; extract of taraxicum, sufficient. Mix and make into 60 pills, of which 3 are to be taken in the morning and a similar number on going to bed.

3. Infusion of cinchona bark, made by exhausting 300 grains of the cut-barked bark with 6 ounces of boiling water, and sweetening with half an ounce of syrup of orange peel. A tablespoonful to be taken every 2 hours. —*St. Louis Med. and Surg. Journal.*

A Good Bread for Diabetics.

In a communication published in the *Boston Med. and Surg. Journal*, JOHN A. JEFFRIES spoke of a good bread for

diabetics. All are now doubtless aware, he said, that the so-called gluten flours are not what they should be, and will agree that the first thing in the treatment of diabetic patients is the avoidance of starches and sugars. It is, therefore, very desirable to get a bread, or more accurately a substitute for bread, which will satisfy the cravings of the patient for bread and yet fill the therapeutic indications. Experience seems to show that the craving is not for starch but for the form and taste of the bread; that is for the sensations produced by such food in the mouth and nose by the senses of touch, taste, and smell, not for starch in the stomach and intestines. Were this not the case, he said, it would be impossible to satisfy the patient's wants.

He showed samples of bread which he thought much more nearly fulfilled the requisites of the case than any now in use. He has succeeded in preparing two kinds, one simply an improvement on those now in use but easily procured and inexpensive; the other a great improvement, but at present difficult to procure and expensive.

The first is made by using equal parts of bran and graham flour, or, put in accurate form: One cup of graham flour; one cup of best bran previously scalded with one cup of boiling water; two eggs; German yeast or baking powder; salt to taste; one cup of milk or water. To be mixed with a spoon. Such a bread contains 17.72 per cent. of starch, the equivalent of 19.68 per cent. sugar.

The second is made from the gluten of the starch factories ground to a fine flour. In the ordinary method of manufacture, he said, the gluten is fermented out and lost, but lately efforts have been made to separate it out by machinery for sizing. The bread is made

as follows : One cup gluten flour ; one cup best bran previously scalded ; one teaspoonful of baking powder ; salt to taste ; two eggs ; one cup milk or water.

To be mixed with a spoon. If the hands are used the result will be even more disastrous than in the making of ordinary bread. This bread is wholesome, palatable, nutritious, and contains but 4.57 per cent. of starch, equal to 5.08 per cent. of sugar. The analyses were made by Dr. Charles Harrington.

In answer to the question by Dr. A. N. Blodgett, why Dr. Jeffries thought it is so essential that this bread should be made with a spoon, Dr. Jeffries said that all bread, even ordinary bread, such as everybody has, is much better when not touched with the hand, and this is especially true of this gluten bread. Some of the gluten he exhibited is separated out for manufacture and used as shoemaker's wax in Germany. If it is worked with the hand it is apt to be soggy and not rise at all ; if worked with the spoon it will rise nicely.

The Kidneys in Diabetes.

R. FICHTNER (*Virch. Arch.*, cxiv., Hft. 3) points out that among the lesions observed in the kidneys of subjects of diabetes, glycogenic degeneration or infiltration of the epithelia of Henle's tubes is one of the most constant, but yet difficult of explanation. Changes in the cortex have been less frequently met with ; some have seen acute interstitial inflammation, leading even to granular kidney ; others describe epithelial necrosis, especially in cases of diabetic coma, attributable to the action of acetone and diacetic acid. Fatty degeneration is described by various writers, notably V. Frerichs and Ebstein, the latter meeting with marked fatty change and free fat between cells. Fichtner, in two cases of

diabetic coma, found, in addition to the glycogenic degeneration of Henle's tubes, very marked fatty degeneration of the cortical epithelium, the fat globules and particles being in each case regularly arranged along the periphery of the cells just beneath the basement membrane ; and those tubules solely were affected which contained cloudy epithelium. The epithelia of other parts, as well as the glomeruli and the connective tissue, were apparently normal ; and there was no indication of necrotic or inflammatory change. The absence of inflammation was remarkable, especially in one of the cases, which during life presented albuminuria and renal casts, and was, therefore, considered to be a case of chronic nephritis, with diabetes. The peculiar type of fatty change had been met with by Fichtner in a case of chronic nephritis following alcoholism, but in that case many tubules exhibited a more diffuse degeneration than the variety described. In cases of phosphorus poisoning the cells are filled with fat globules of various size and grouping. In seeking for an explanation of the lesion, he remarks that both these patients died comatose, and had the peculiar odor of the breath indicative of acetone and diacetic acid in the urine. Having regard to the previous observations of Albertoni and Pisenti, as well as of Ebstein, which point to the connection between epithelial necrosis in the kidney and the presence of these substances in the urine, it is highly probable that the special kind of fatty degeneration must be referred to these or allied bodies. If fatty degeneration occurs apart from coma, its cause must be found in the excess of sugar. The subject is open to experimental research, which may throw some light upon the subject of renal secretion.—*Lancet*.

THE AMERICAN MEDICAL DIGEST.

PART II.

SURGERY.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

Treatment of Scalp Wounds ; An Old Method Revived.

DR. F. C. HUSSON (*International Journal of Surgery*):

Much has been written for and against the use of sutures in scalp wounds, and I will not venture an opinion, contenting myself with stating that sometimes they are excellent and at other times they are harmful. Moreover, the suture to be properly used, must be perfectly aseptic, and the same applies to the needles. How often

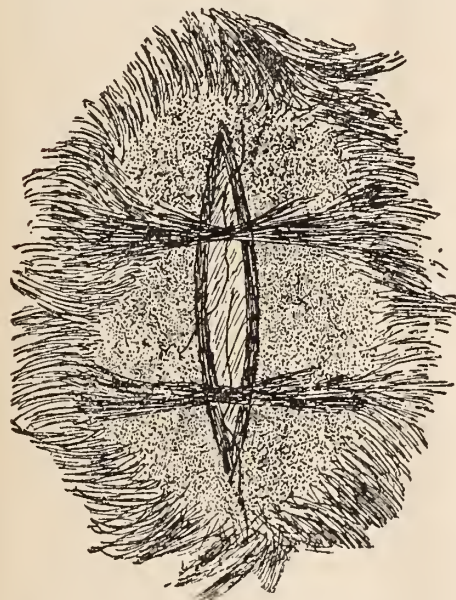


Fig. 1.—Sutures in Position.

does it happen that the needles in a pocket case are rusty and the silk dirty, for it is well known that the ordinary model of pocket case is one of the most difficult things to keep clean. The following little device, which I have used a number of times with perfect satisfaction, is, in my opinion, excellent, and in many cases advantageously replaces the suture. It is, moreover, perfectly painless and easy of application.

1889.—No. 3 b.

This device is not new, and I claim for it no originality. My desire is simply to keep a good practical point in surgery from sinking into oblivion.

I have treated a number of scalp wounds in the following manner, and will cite as an illustration a case which occurred to me on a visit to the country, when I was unprovided with surgical appliances of any kind :

A boy, eight years of age, fell and struck his head against a sharp stone, causing a ragged wound some two inches long on the vertex. Having checked the hemorrhage by compression, and washed the wound with clean cold water, I proceeded to close it in

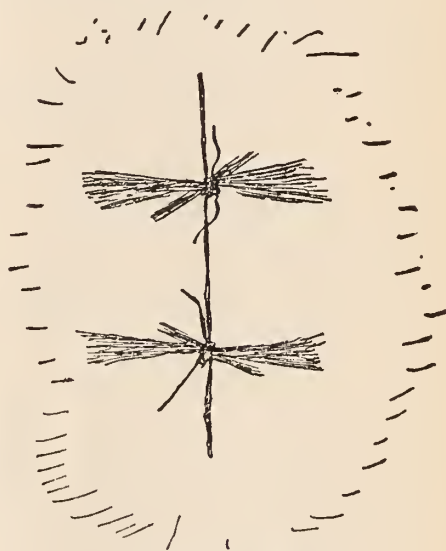


Fig. 2.—Sutures in Position.

the following manner : First, the hair at the edges of the wound was cut as close as possible. I then took a lock of hair on each side, and at a distance of about a quarter of an inch from the edges of the cut, laid my thread lengthwise over the wound, crossed the hair, and had an assistant hold it tightly enough to bring the lips of the wound in apposition. I then tied the two locks of hair securely, and repeated the

manœuvre three times, obtaining in this manner perfect apposition, just as if I had used three points of interrupted suture. Figures 1 and 2 illustrate perfectly the method of procedure. The patient's wound healed by primary intention.

Advantages of Plaster-of-Paris Dressings as a Means of Spinal Support.

DR. SAYRE (*New York Med. Jour.*):

The writer believes that the plaster-of-Paris jacket and jury-mast in cases of spondylitis, or Pott's disease, and plaster-of-Paris corset in cases of rotary lateral curvature, are altogether superior to any other instruments yet devised for the relief of these infirmities, and for the following reasons:

1. They can be applied in any place and by any competent physician with perfect success, without the intervention or aid of any instrument maker. This to the country practitioner is a point of most vital importance.

2. They can be worn with perfect ease and comfort to the patient in all cases where they can be properly applied.

3. The plaster-of-Paris jacket and jury-mast retains the spinal column in a more quiescent condition, and relieves the inflamed parts from the pressure of the superincumbent head and shoulders in cases of spondylitis, better than any other device heretofore employed.

4. That, being applied while the hands are over the head and the body partially suspended, the thoracic cavity is expanded to its utmost capacity, thereby increasing the ability for full inspiration better than can be done by any instrument which is retained in position by girdling the thorax, either by fixed bands or by elastic straps.

5. That, being porous and permeable to the air, it does not interfere with the

insensible perspiration, and is therefore infinitely more healthy than the shellac, gutta-percha, felt, leather, rawhide, silicate of sodium, or any of the other substitutes that have been suggested to take its place.

6. That it does not "breed vermin" or other filth, as has been charged against it, but is, on the contrary, more cleanly and more healthy on account of its porosity.

7. That, in cases of rotary lateral curvature, when the deformity cannot be overcome by any amount of lateral pressure until the column has been elongated, the plaster-of-Paris bandage can be more accurately applied than any other material, and, thus accurately adjusted to all of the irregularities of the body and closely fitting it in every place, will retain the body in the improved position which partial self-suspension gives it better than any other device, and be infinitely more comfortable to the patient.

Experimental Excision of the Pancreas.

At a meeting of the Reale Accademia di Medicina, Turin, Dr. MARTINOTTI described certain experiments he had made as to the effects of excision of the pancreas in dogs and cats. He had first removed the horizontal portion of the organ, and later on the vertical part, taking care to perform both operations at equal intervals of time after the animals had been fed and when the digestive function was in a state of inactivity. On comparing the two portions he found no evidence of compensatory hyperplasia in the one removed last. On removing the whole organ at once, however, except a tiny piece attached to the duodenum and in normal relation to the excretory duct, the stump examined after a certain time had elapsed presented different character-

istics, according to the extent to which it had been affected directly by the operation. The portion in immediate contact with the duodenum was unchanged, whilst the other extremity, which bore the amputation scar, showed signs of regeneration of the gland structure. There was no sign of increased activity in the liver or in Brunner's glands, which Landois is inclined to look upon as functionally analogous to the pancreas; on the other hand, the intestinal glands had evidently had an increased amount of work thrown upon them. At another meeting Dr. Martinotti exhibited the viscera of dogs from which he had removed the whole of the pancreas; the animals had been killed and dissected in the presence of several medical men the day before. In none was there a trace of peritonitis or of extravasated blood. In a dog on which the operation had been performed on June 23, the intestinal coils were healthy, and quite free from adhesions. A piece of pancreas, of the size of a small chestnut, was attached to the duodenum, with which it communicated by a special duct. In an animal operated on on June 25, and in another operated on July 14, almost precisely similar conditions were found, the portion of pancreas in the former being of the size of a filbert, and in the latter of a lentil. The gastroduodenal mucous membrane and the abdominal viscera were normal. On the other hand, in a puppy operated on July 15, which at first appeared to rally from the operation, but which afterward began to waste rapidly, no trace of pancreas was found; the duodenum was bent upon itself, and was adherent to the wound in the mesentery. Through the loop thus formed a knuckle of small gut was strangulated, and the lower part of the intestinal canal was entirely

empty. Dr. Martinotti pointed out that the small portion of pancreas left in these cases was utterly insufficient to discharge the functions of the organ; he regarded them as proofs of attempted regeneration, as he was certain he had removed every particle of the gland, with the exception of a few acini, which were intimately connected with the walls of the duodenum, the bile duct, and the blood vessels. These acini had formed the starting point of the regenerative action. He concludes that the pancreas can be removed (from dogs) without any ill effect, if the operation is done with proper precautions, especially as regard antiseptics. The greatest danger connected with the operation is the formation of adhesions, which may lead to strangulation of intestine.—*British Medical Journal*.

Connective Tissue Tumors.

IN typical connective tissue tumors the growth is circumscribed by a capsule of fibrous tissue, so that a circumscribed tumor simply separates or displaces the surrounding structures; but there are other tumors which are diffused; they grow from the periphery; they infiltrate surrounding parts. This distinction is very important to bear in mind in making an anatomical diagnosis between benign and malignant tumors. Whenever you find a tumor surrounded by a capsule, the diagnosis is positive that it is not a carcinoma, but it does not follow that it is not a malignant tumor.—*Coll. and Clin. Record*.

A New Surgical Dressing.

DR. J. H. BURCHMORE suggests a dressing for which he claims some advantages (*Medical Standard*):

It consists simply in covering the injured part, whatever it may be, hand, arm, leg or foot, with a sort of glass jar,

or in the case of some of the flat or irregular parts, with a flanged glass box, and packing the ends with some air-tight material, such as cotton, rubber, adhesive plaster, etc. The suppurating lesion, in the case of open wounds, is where it can be easily seen, and irrigated when necessary, with no danger of external infection.

In the case of a finger wound, for instance, some antiseptic solution is placed in the tube, and, after giving the wound the attention it needs, the finger is run into the tube to within an inch of the end. The open end of the tube, which the finger will not completely close, is packed with borated cotton (c, fig. 16) to the distance of half an inch. Over this is placed an air-tight

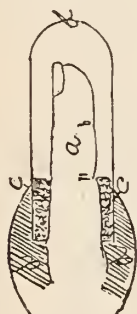


Fig. 16.

dressing (d, fig. 16), and thus the wound is sealed in a glass jar, where it can be observed without disturbing the dressing. In the case of a wound that needs irrigation, the glass is packed as before, but has in addition tubes and valves (a, a, fig. 17) for the entrance and exit of whatever irrigating solution that may be employed.

The Resection of Great Venous Trunks in the Extirpation of Malignant Tumors.

MADLUNG has been trying the effect of resecting the great venous trunks near malignant tumors when the cancerous disease did not appear to have become generalized, on the ground that

the veins with the lymphatics form the road by which cancer extends. Schevan, in his inaugural thesis (*Ctrlbl. f. Chir.*) reports fifteen cases. In eleven the jugular was resected, once on both sides. Twice there was resection of the common carotid and of the jugular at the same time, eight times for glandular metastatic carcinoma, and three times for lympho-sarcoma. In four other cases the femoral vein was resected, once with resection of the artery, twice for cancerous glands following primary disease of the genitals, once for a tumor of the vagina, and once for primary cancer of the glands. Three patients died as a result of the operation; one of gangrene of the lower extremity and septicæmia following resection of the

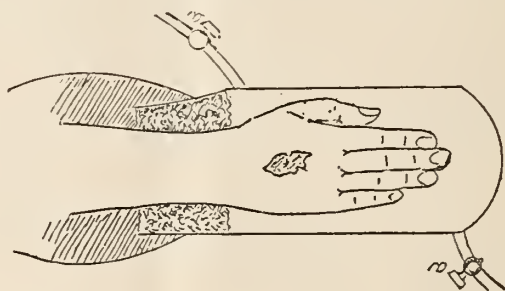


Fig. 17.

femoral vein, another as a result of resection of the common carotid and jugular, a third without the cause of death being positively established. Three died of local return, two of exhaustion, and two more of the primary disease, which could not be removed. Two were still alive, though suffering from a fatal return of the disease, and one was cured, though the observation dated only one month after the operation. Two patients were considered as cured; in one, death followed two years after the operation without any return, and the other had lived three years without a return.—*New York Medical Journal*.

Luffa, a Substitute for Sponge.

LUFFA ÆGYPTIACA MILL, a plant belonging to the natural family *Cucurbitaceæ*, and growing in all southern countries of the Old World, promises to become a successful rival of sponge. Its ripe fruits contain a rich and soft pith, which after having been well dried and treated with a solution of permanganate of potassium, gives an excellent material possessing a high absorbing power. (VRATCH.)

To Abort a Boil.

DR. HALLE (*Prat. Méd.*) recommends the following application: Tinct. arnicæ flor., p. ij.; acid. tannic., acaciæ. pulv., āā p. j. M. Paint upon the part and the surface immediately surrounding it every fifteen minutes until a thick and resistant coat results. This will speedily relieve the pain and abort the boil.—*Coll. and Clin. Record.*

Combination of Sodium Chloride and Corrosive Sublimate as an Antiseptic.

LUBBERT and SCHNEIDER, after exhaustive experimentation, decide that sodium chloride, added to corrosive sublimate solutions, accomplishes the same results as do the addition of acids, and yet is free from many of the disadvantages of the latter. Common salt, when added to sublimate solutions, increases the solubility of the mercury and prevents the precipitation of an albuminate when albuminous substances are present. A double salt results, which is free from any irritant action upon tissues. They also recommend the addition of glycerine to sublimate dressings, as it renders them more smooth and increases the adhesion of the sublimate to the gauze. Their conclusions are: that sublimate and gauze dressings are aseptic; that the reduction action of organic substances is

reduced to a minimum, and hence the dressings longer retain their proportion of sublimate; further, that the addition of glycerine makes a smoother dressing; that the absorbing power of the gauze is much increased by the presence of sodium chloride and glycerine; and that, owing to their ready solubility, the combined salts are capable of destroying bacteria in the presence of albumens.

The authors found that corrosive sublimate gauze dries much more quickly if a little alcohol is added to the solution, but care must be taken that not too much is added, as in excess alcohol precipitates the chloride of sodium from its combination with the mercurial salt.

The following solution is recommended for dressings: R. Hydrarg. bichlor., 3 parts; sodii chlor., 100 parts; aq. destil., 600 parts; glycerin., 100 parts; alcohol, 200 parts. Dissolve the chloride of sodium in water, filter, then add the sublimate, and when it has completely dissolved add the alcohol. Dressings will usually absorb one and a half times their weight of this solution.—*Centralblatt für Bacteriol.*

Anodyne Liniment.

As an anodyne liniment, the following is recommended by Dr. BRUBAKER: R. Chlor. hydr., 3 ij, liniment saponis, f 3 iv. M. Sig. Rub on the affected part.

Diagnosis of Disease in the Antrum of Highmore.

AMONG the diseases which frequently puzzle the practitioner and escape early diagnosis are diseases of the antrum. Shut in by bony walls, catarrhal or purulent inflammation of its mucous lining may continue for months, causing only obscure pains in adjacent parts, which are attributed to "neuralgia."

Dr. Schmidt (*Berlin. Klin. Woch.*), in an article upon diseases of the antrum, describes a simple method for diagnosing collections of pus or other fluids in this cavity, which may be of great value when the natural opening into the nasal cavity is closed, and when the patient objects to losing a tooth, or has no upper teeth to lose.

According to his method, a very small pledget of cotton is placed just below the antrum end of the lower turbinated bone, and being then saturated with a 20 per cent. solution of cocaine, is left in that situation for ten minutes. With a cravatz syringe-needle the anterior end of the turbinated bone is now raised and the needle is driven diagonally outward in the direction of the external opening of the ear. If the first attempt fails, another should be made a little higher and further back. In most cases the wall may be pierced at one or other point, and pus may be drawn into the syringe. Careful disinfection must of course be practiced. The syringe-needle used in this operation should be twice as long and more than twice as thick as the ordinary hypodermic needle, with a curve like an ear catheter. Its point should be rounded, with a sharp edge. The operation is almost painless, and has no unpleasant consequences. One may obtain by it not only pus, but also bits of growths for microscopic examination.

In the last five months Dr. Schmidt has by this method diagnosed empyema in 16 cases (in one of which it was bilateral) and has 12 times had negative results.

For repeated irrigations and prolonged drainage he thinks a large opening through the alveolar ridge is better than a large one through the walls of the nasal cavity. He is informed that his method of aspirating the antrum

has already been published, but has not been able to find the alleged publication.—*Md. Medical Journal*.

To Control Hemorrhage During Amputation of the Tongue.

WYETH has found so much comfort and satisfaction by employing the écraseur to control hemorrhage during the operation of excision of a portion of or the whole tongue, that he now brings his technique to the attention of surgeons.—*Canadian Practitioner*.

Torticollis Cured by Operation.

A. H. BAINES, in *British Medical Journal*:

A child of eight was brought to me for very pronounced wry-neck, which had existed since birth, and was said to be due to injury during parturition. As the child grew the deformity became much more marked, so that at the time I saw her (at the beginning of January of last year) the head was drawn down and turned much to the right, the mouth and eyelids being drawn down, and giving an altered expression to the face. The corresponding shoulder was considerably raised, and the upper dorsal spine showed an incipient lateral curve. Seeing that mechanical contrivances would be of no avail, I advised immediate operation, which was wisely consented to. The sternal portion of the muscle was chiefly at fault, and the only one requiring division.

Passing a fine sharp pointed tenotomy knife on the flat in front of this, about an inch above the clavicle, and then, on withdrawal, inserting a blunt pointed tenotome, and turning the cutting edge against the tendon, with a sawing movement, I proceeded to cut through it. To my surprise, this required more pressure than I expected, when suddenly, with an easily audible snap, it was severed,

but, as the force used was under control, of course without injury to the underlying vessels. After the wound had healed, massage of the muscles of the neck and back was employed, and a weight was frequently carried in the hand of the affected side to draw the shoulder down. It is a complete cure, and there is now not the slightest deformity, the head and face being held in a vertical line, and the spine being again quite straight.

Arresting Hemorrhage.

THE following are the means of arresting hemorrhage, arranged in their order of usefulness: ligature, torsion; acupressure; compression, forced flexion of a limb; styptics; and the actual cautery.—PROFESSOR GROSS.—*Medical and Surgical Reporter*.

Aphorisms in Aseptic and Antiseptic Surgery and Gynecology.

DR. F. T. MERIWETHER, in an article read before the Southern Surgical and Gynecological Society, at Birmingham, Ala., December 4, 1888, gives the following:

1. The surgeon and gynecologist should always carry either a solution of the bichloride of mercury, or the antiseptic tablets. A convenient way of carrying the bichloride is to make a solution of 3 j to $\bar{3}$ j of alcohol; of this 3 j in a pint of water makes a 1-1000 solution; or you may carry $7\frac{1}{2}$ grains of the salt and $2\frac{1}{2}$ grains of sodium chloride in a capsule; dissolving one in a pint of water also giving a 1-1000 solution.

2. A more condensed way to carry it is to make a solution of 1 1-12 grains of the bichloride in 2 minims of glycerine, with the addition of $\frac{1}{4}$ grain of sodium chloride. This represents about 1 grain of the sublimate to 2 minims of solution,

a small part being thrown down as calomel. Of this 15 drops to the pint make a 1-1000 solution.

3. The bichloride in an acid solution is more efficient as an antiseptic than in a neutral or alkaline one, and therefore it is well to add 5 parts of hydrochloric or tartaric acid to each 1000 parts of solution. This also prevents, to some extent, the decomposition of the sublimate, and prevents the formation of the albuminate of mercury, an inert chemical, when brought in contact with the albumen of blood or serum.

4. Carbolic acid should be in pure crystals, of which 3 vi to the pint of water makes a 5 p. c. solution. A little more elegant preparation, and one which has no effect upon polished steel, and at the same time is devoid of the odor and caustic properties of pure carbolic acid, is a mixture of 1 part carbolic acid crystals and 3 parts powdered camphor. A 20 p. c. solution of this has the same germicidal properties as a 5 p. c. carbolic acid.

5. Iodoform may be carried in a tin pepper-box fitted with a lid to prevent smelling; or you may have one made to order.

6. A solution of equal parts of pot. iodide and the biniodide of mercury, 1 to 4000 strength, is a most valuable antiseptic, being efficient, and can be applied to the skin in a 5 p. c. solution without causing any irritation.

7. To prepare bichloride gauze, take 1 part of sublimate, 2 parts common salt and 500 parts water; the gauze is made of cheese cloth, boiled in water with a little soda, until the grease is taken out. Soak this gauze in the above solution for an hour, and then wring out and partially dry. Put it in a glass jar air-tight, keeping end slightly moist, and it will stay in a good condition for several months.

8. Iodoform gauze is made by mixing 3 iii of powdered iodoform with 5 vi of castile soap suds, making an emulsion; rub this into 2½ yards of gauze, this making a 10 p. c. gauze, which is sufficient; while for a 25 p. c. gauze use 3 vii of iodoform.

9. The best mode of rendering instruments and dressings sterile is heat. Have a copper cylinder made and fill it about ½ full of water; into this place baskets or pans, containing instruments, etc., and provided with legs to raise them above the water. The lid of the cylinder has a manometer, safety-valve and stop-cock. This is now closed and the temperature brought to 230° F.

10. If the instruments, however, are placed in a pan of water and the water brought to the boiling point and kept there for ten minutes, bacteria are killed and the growth of even the spores is much retarded. To insure boiling of all the water, the pan should be covered. This is probably the best and most practicable method of rendering instruments aseptic. They should be boiled both before and after an operation.

11. Tannin wool is an excellent styptic and antiseptic. To make it, add to distilled water pure tannin until saturated, stirring all the time; then add cotton wool until all the solution is taken up; put into an evaporating jar and dry, and then keep it in a closed jar.

Before using it should be teased out. It may be iodized by adding an ethereal solution of iodine, 1 gr. to 3 ii, allowing the ether to evaporate.

12. Sponges should be cleansed by either washing them thoroughly with green soap and a 1-1000 bichloride solution, or by the following method:

13. Take new sponges, which are freed from sand by beating, and soak

them in a 1-1000 solution of potassium permanganate for twenty-four hours. Then, after washing out the permanganate with warm water, immerse them in the following solution until they whiten, but no longer: Take of sodium sulphite 1 part, 1-5 part of a watery solution of either hydrochloric or oxalic acid of a strength 8 parts to 100 and of water 100 parts. Taking them out of this, they should be thoroughly washed in clean running water; then kept in a carbolic acid 1-20 or bichloride 1-1000 solution, in a close jar until used.

14. Cleaning sponges with a 1-5 solution of sulphurous acid in water, after an operation renders them perfectly white, so you may detect any clots or detritus which may have become enmeshed.

15. Sponges which have been thus prepared are perfectly aseptic, and are cheap. A sponge which will sometimes come handy, is made by taking balls of absorbent cotton of convenient size and tying around them mosquito netting. These, soaked in a 1-20 carbolic acid, or 1-1000 bichloride solution, or boiled for ten minutes, are practically aseptic. Half a dozen or more may be kept on hand, and being so cheap, should only be used once.

16. Sutures and ligatures may either be silk, gut, silver or tendon, and should have been rendered aseptic in a 1-20 carbolic acid or 1-1000 solution, or, in the case of gut, in oil of juniper; or else they should be soaked or dipped into boiling water for a minute or two just before using.

17. The hands should be thoroughly washed with a nail brush and soap, preferably one of the antiseptic soaps, of which the biniodide of mercury is the best. Particular attention should be paid to the nails, cleansing the subungual space thoroughly.

18. Drains may be of rubber, glass, horse-hair or gut. Bone drains are not safe, as there is some danger of infecting the wound. If certain as to their aseptic condition, they may be used, as they are rapidly absorbed, and so require no removal.

19. For draining cavities, particularly the abdominal, long glass drains should be used, reaching to the bottom of the cavity. By twisting a piece of bichloride or iodoform gauze into a rope and passing it to the bottom of the tube, the other end being lost in the dressing externally, we siphon, as it were, all liquids left behind and exudates. These ropes may be changed, when necessary, without disturbing the tube.

20. The effusion can also be removed by drawing it up with a small syringe, fitted with a piece of rubber tubing—this tubing is passed through the drain to the bottom of the cavity.

21. In an emergency case, common lamp-wicking, impregnated with iodoform, may be used as a drain, particularly when the secretions are small.

22. The site of operation should first be shaved if it has any hair upon it, then cleansed with soap, water and a nail brush, then wiped off with alcohol, ether, chloroform or turpentine, and then with a 1-1000 bichloride solution—cloths wrung out of the same solution should be laid upon the body covering the proposed line of incision until the operation is commenced.

23. Special care should be taken when the field of operation is in the axilla or nates, as there the pyogenic bacteria most abound.

24. In operations upon the head or face the hair should be entirely covered with a towel wrung out of a 1-1000 bichloride solution. This should be tied on tight to prevent infection in case the operator wishes to move the head.

25. During the operation the wound should be frequently douched with a 1-2000 or 1-3000 bichloride solution or a 1-50 carbolic acid, and the operator should now and then, particularly before inserting a finger or hand into the wound, dip his hand into the same solution.

26. The operator and assistants should, if convenient, wear aprons perfectly clean and made of any goods, rubber, etc., and reaching almost to the ankles. This is for their own protection as well as that of the patient.

27. In order to obtain an aseptic wound we must have: 1, perfect cleanliness of surface with no infection from hands or instruments; 2, perfect coaptation of wound surfaces; 3, sutures strong enough, and so placed as to prevent gaping; 4, rest; 5, position; 6, a certain amount of equable pressure; 7, an even temperature; 8, dryness of wound surface; 9, good drainage, including in this perfect absorption and disinfection of discharges in the dressing; 10, an antiseptic dressing that will prevent entirely the ingress to or contact of the air, laden with micro-organisms or the causes of putrefactive changes, where they will find a nidus for growth.

28. After the sutures have been properly adjusted and cut, the incision should be dusted with iodoform or boracic acid, as much for their absorbent as for their antiseptic properties.

29. Bichloride or iodoform gauze should be used with profusion in dressing wounds, in order that the discharges may be perfectly absorbed and disinfected, and that ingress of air may be prevented,

30. In emergency cases, bismuth, freshly roasted and ground coffee, finely pulverized; sawdust medicated with the bichloride or carbolic acid; filter

or blotting paper, soaked in a 2 p. c. solution of bichloride may be used as dressings.

31. Salol, salicylic acid and hydrate of chloral, 2 grs. to 3 i, make excellent antiseptic fluids when nothing else can be obtained.

32. Turpentine, something always at hand, can be used as an antiseptic by soaking the dressings in it. It prevents the flow of serum and acts as an antiseptic in that way.

33. Varick's method of applying heat is good. After the operation apply heat in the form of cloths wrung out of boiling water to the wound surfaces. This coagulates the albumen and practically forms an impermeable dressing itself. The water must be boiling and close at hand, as merely hot water does no good. After the application the sutures may be adjusted as wished.

34. Where union by first intention is desired, the dressing should not be removed until the seventh to tenth day, unless special indications arise, when, if you have observed proper care, you may expect to find union and everything in a sweet, clean and aseptic condition. In many cases the first dressing is all that is required.

35. After operations upon cavities it is well to wash them out with either a 5 p. c. solution of common salt or clean, recently boiled water, to remove any excess of bichloride. In cases in which we have no antiseptics at hand, these will answer for douching, irrigation, etc.

36. In scalp wounds always shave the head, scrub with a brush and soap, remove all fatty matter with alcohol, ether or turpentine, and then irrigate with a bichloride solution. Never examine the wound until you do this.

37. In compound fractures of bones, cleanse the wound of all dirt, spiculæ, etc., and irrigate with a 1-30 carbolic

acid or 1-2000 bichloride solution. Get the wound in good position, either by suture or adhesive strips, and dust with iodoform; cover with iodoform or bichloride gauze, and put the part in an immovable dressing. If so treated these wounds seldom require any after attention.

38. Burns should be treated antiseptically as follows: As soon as possible after the injury give the patient a hypodermic injection of morphia and put him under the influence of an anæsthetic. Cleanse the burn, and with a stiff brush, soap and bichloride or carbolic acid solution, scrub thoroughly. After this irrigate it well and dust with iodoform or boracic acid. Dress with cotton or gauze as you would any other form of wound. By this method you will have your patient fairly comfortable, or at least free from that excruciating pain so common to extensive burns, in a few hours. Shock is not so pronounced in these cases, and if treated properly they do not slough or suppurate.

39. In old, indolent ulcers the best dressing is antipyrine. It stimulates the granulations, making them take on a new growth, keeps the surfaces perfectly dry and aseptic, something nothing else will do, and the small amount which is absorbed improves the patient's general condition.

40. In the bladder and urethra, the best way of rendering the mucous membrane aseptic is by a continuous stream of water, preventing in this way the lodgment of any germs. This irrigation should be repeated frequently during operations, or, if possible, should be continuous.

41. A carbolized vaseline or one of the following ointments are to be preferred as lubricants to lard or commercial vaseline :

Vaseline, 30 parts; boric acid, 4 parts; vaseline, 120 parts; biniodide of mercury, 1 part; vaseline, 30 parts; iodoform, finely pulverized, iodol, salol or salicylic acid, 4 parts; vaseline, 30 parts; creasote, 1 part; olive oil, 100 parts; carbolic acid, 10 parts. Either of these make good antiseptic lubricants.

42. The vagina should always be wiped out previous to examination with a wad of cotton soaked in a carbolic acid solution, and before an operation should be irrigated with the same fluid.

43. After operation the vagina should be irrigated thoroughly and the wound surfaces dusted with iodoform; then an antiseptic tampon should be introduced to absorb the discharges, but should be removed early.

44. Boro-glyceride, 20 to 50 p. c., is an efficient antiseptic, and for use on tampons is to be preferred to any thing.

45. In the eye, calomel is the most efficient dry antiseptic we have, and may be used *ad libitum*.

46. In gonorrhea the ol. gaultheria is of great service, being an antiseptic and apparently having some specific action upon the gonococcus. It should be given internally.

47. Irrigation with a 1-5000 to 1-20,000 bichloride solution should be used in the treatment of gonorrhea.

48. In gonorrhea in women, cleanse the vagina and vulva with a 1-10,000 bichloride solution, and then rub the mucous membrane with a pledget of cotton soaked in a 1-100 solution of the same. This is to remove the superficial layer of epithelium which contains the gonococcus. Dust the vagina and vulva with iodoform and pack the vagina with iodoform gauze. This gauze is to be removed every four or five days and the vagina irrigated with a 1-2000 bichloride

solution and the gauze renewed. After the third or fourth removal the gauze is omitted and the vagina irrigated every day for two weeks with the bichloride solution. This must be thoroughly done to succeed.

49. In gonorrheal arthritis, after cleansing the surface properly, a trocar, disinfected, should be inserted and the fluid drawn off. The joint should then be irrigated with a 1-2000 bichloride or 1-30 carbolic acid solution until the fluid returns free from blood or pus; close the puncture with iodoform or bichloride gauze and adhesive strips, and in ten or twelve days begin passive motion.

50. In purulent otorrhœa, the ear should be washed out with a 1-1000 bichloride or 1-30 carbolic acid solution, then dried, and then insufflated with iodoform or boracic acid.

DISEASES OF THE SKIN.

Rectal Eczema.

DR. MONROE, of Louisville, says: Rectal eczema is a frequent but very unmanageable, rectal disorder. Several cases treated by galvanism gave good results. They had previously failed to respond to all remedies other than temporarily. Some three months ago I decided to try the galvanic battery. I applied the negative sponge electrode to the back, and passed a uterine steel electrode, attached to the positive pole, over the eczematous surface for about ten minutes. (I used eight cells.) My patient reported on the third day. He had not had any itching since I made the application. This treatment has been continued ever since about twice a week. No further eczema—the parts have assumed a natural appearance. I have now used it on six other patients, and, so far, with the same happy results.

I have given my patients three drops of Fowler's solution of arsenic in a glass of water thrice daily. This has been all the medication used during the treatment. Most of them had taken the arsenic before without benefit. I do not know whether my patients are permanently cured or not, since they do not like to stop treatment from which they have derived so much relief.—*Medical Standard.*

Chromic Acid In Excessive Sweating.

A CIRCULAR has been sent to all the Prussian army medical officers, advocating chromic acid as an economical and efficient means of checking excessive perspiration. In hyperhidrosis of the feet the application of a ten per cent. solution, repeated every three or six weeks, is sufficient to prevent any inconvenience from this source.—*Medical Press and Circular.*

Treatment of Baldness.

DR. LASSAR has a communication on the treatment of the hair in the *Therapeutische Monatshefte*. He regards alopecia as a parasitic disease, and he recommends an antiparasitic treatment which has commended itself in more than one thousand cases. The scalp should be soaped by an expert hand for ten minutes daily for the first six or eight weeks, later less frequently. For this purpose a strong tar soap is best. After the scalp is well lathered the soap is carefully washed off with tepid followed by cool water, contained in an irrigator or watering pot. The washing with cool water hardens the scalp in a happy manner against the colds to which patients with alopecia are usually disposed. The scalp is then dried gently and rubbed with : Sol. hydrarg. bichlor., gr. viiss to f $\frac{3}{4}$ iv $\frac{3}{4}$; glycerini; spir. cologn., āā f $\frac{3}{4}$ iss.

It is then dried and rubbed with absolute alcohol, to which one-half per cent. naphthol has been added; and then as much of the following as possible is rubbed into the scalp, which is now quite free of fat: Acidi salicylici., gr. xxx; tinct. benzoini, ℥ xlv; oleipedum tauri (neat's foot oil), ad f $\frac{3}{4}$ iii.

The soaping removes all adherent substances, the sublimate solution is readily absorbed by the mouths of the hair follicles, the alcohol dries the scalp, removes the fat and disinfects it, and finally the mixture of salicylic acid and oil is taken up by all the pores and exerts its action in the interior of the glands.

A daily use of this treatment will bring about a favorable result in the majority of the cases. This is especially true in the cases of young women and girls. The brittle, lustreless hair becomes flexible and elastic. Hundreds of new, vigorous hairs shoot up.—*Wiener Med. Presse.*

Face Powder.

THE following yields a superior article. Any toilet powder must, however, be carefully sifted through bolting cloth, or the finest hair sieve : Zinc oxide, talc. (powder), each, ozs. 10; chalk, prepared, ozs. 5; starch, ozs. 30. Each one of the three first ingredients are triturated with their weight of starch, previously reduced to very fine powder. They are then thoroughly mixed, the perfume added and sifted. The starch used should be the best lump starch. Perfume to suit, or with the following : Ext. jasmin, fl. ozs. 1; oil bergamot, m. 30; oils rose, neroli, each m. 15; oils ylang, orris, each m. 3; tincture musk, m. 10; cunarin, gr. 1-10. It may be tinted as desired.—*Medical Herald.*

VENEREAL DISEASES.

Novel Method of Treating Gonorrhea.

DR. JOS. ZEISLER (*Western Medical Reporter*) :

The new plan, with which I became familiar through the kindness of Dr. P. S. Pixley, of Elkhart, Ind., consists in introducing dry powders into the male urethra.

The instrument consists of three principal parts, two of which resemble very much the original form of the urethroscope, as devised by Désormeaux, Fenger and others; namely, 1st, a canula, with a cup attached to

one end, and 2d, an obturator, to facilitate the introduction; 3d, a hollow spiral, whose object is to convey the powder through the canula into the urethra. The canula has in the present form of the instrument a length of 5 inches, and a diameter of about $\frac{3}{4}$ inch (corresponding to No. 20, of the French gauge). The cup has a capacity for about two drams of dry powder; a narrow bridge with a set screw is attached transversely to the cup, in order to fasten the spiral in its proper position. The length of the spiral corresponds exactly to that of the canula,

end of the same, when fully inserted; the upper end of the spiral is formed by a milled head, on the top of which is an arrow, indicating the direction in which the spiral should be turned. Just below the milled head is a groove into which fits the set screw. Below this groove, to what may be called the neck of the spiral, is attached an agitator, which during the turning continually moves the powder toward the spiral. The obturator, which needs no further description, transforms the canula practically into a solid straight urethral sound.

The instrument could, of course, be easily manufactured in different sizes, although the present (No. 20) will answer for most cases. The length of five inches will allow the introduction up to the membranous urethra only, which in acute cases, where the inflammation has not invaded the deeper parts, will be perfectly sufficient. With a slight modification, increasing the length of the canula and spiral, and placing the cup under an angle, the instrument could also be adapted for the purpose of treating the deepest parts of the urethra.

Mode of operation: The patient is directed to evacuate his bladder perfectly; next, the urethra is thoroughly washed out with a weak solution of permanganate of potassium (1 : 10,000), or some other suitable alkaline solution; this may be best done by the well known retrojector. Now, the urethra is dried as perfectly as possible by gently stripping the penis with a clean towel. The patient is then placed in a recumbent position, and the instrument, with the obturator inserted, is lubricated (best with glycerine), and gently introduced into the urethra, back to the pars membranacea. The obturator is now gently withdrawn, so as to cause



HALF SIZE.

Cut showing a vertical section of the instrument, with the spiral in its place.

so as not to protrude beyond the lower

the least possible irritation of the mucous membrane, the spiral substituted therefor, and fastened by the set screw into its place. The medicament is now placed into the cup, and by constant turning of the spiral in the direction indicated by the arrow, conveyed through the canula to the deep urethra. At first very little resistance to the turning of the spiral is felt; as soon as the powder begins to be deposited in the urinary channel the operator will experience a decided resistance. The instrument may now be slowly withdrawn, and in this way the whole urethra filled with the powder. The operator can easily regulate the amount of powder he wishes to introduce; it is not possible to pack the urethra too firmly, as the instrument is in a certain measure self-regulating. The operation completed, a small quantity of the powder is placed around the meatus and the glans penis, to keep these parts as dry as possible from the ensuing discharges, and the patient directed to keep the same always covered with dry absorbent cotton.

If properly executed, the whole operation will cause very little inconvenience to the patient; by the previous use of a cocaine solution it can be made absolutely painless. The patient will, during the next few hours naturally have a sensation of fullness; by and by, as the powder is dissolved and eliminated by a profuse watery discharge, the urethra will be emptied within four to six hours.

The number and frequency of operations will depend on the gravity of the symptoms; one application daily will usually be sufficient during the first few days (Dr. Pixley has often done it twice daily when practicable); later it may be done only every second day, or even at longer intervals.

In the composition of the powder, boric acid has been adopted as the basis, to which may be added different drugs to meet the requirements of the case.

For the present the following suggestions may be useful: In the beginning the mildest possible powders should be used: calomel, one part, bismuth subcarbonate, two parts, boric acid, twelve parts. With the decrease of inflammatory symptoms the powder can be made more astringent by an addition in proper proportions of alum, subnitrate of bismuth, salicylic acid, etc.

The Operative Treatment of Hydrocele.

THE last number of Professor BRUN'S *Beiträge zur Klinische Chirurgie*, contains a paper on the "Operative Treatment of Hydrocele and its Ultimate Results," in which Dr. HERTZBERG, of Tübingen, endeavors to prove the superiority of incision over injection by a record and analysis of forty-six cases, in which Volkmann's radical operation was performed. The youngest patient was 12 years of age, and the oldest 56 years; in six cases the hydrocele affected both sides of the scrotum. The operation in each case was performed with full attention to antiseptic details. The vaginal cavity was washed out with a weak solution of corrosive sublimate; a drain-tube of medium size was passed through the cavity, and brought out through a counter-opening at the lower part of the scrotum, and the seat of operation and the surrounding parts were finally covered by a dry dressing of wood-wool. Professor Brun practises partial excision of thickened indurated or superfluous tunica vaginalis, but holds that total excision of this membrane is not required, save in very exceptional cases. Care was taken to relieve the vaginal cavity of all products

that were supposed to be associated with the disease, and in cases where such morbid conditions existed, deposits and growths were removed from the tunica vaginalis, and hydatid and other cystic growths from the testis or epididymis. In thirty-three cases recovery took place without any signs of local or general reaction. In eight cases there was severe general reaction with subjective disorder and prolonged fever. Such conditions, which, however, are now but very rarely observed, are the result of interference with primary healing by effusion of blood into the vaginal cavity, of inflammatory œdema of the scrotum, of swelling of the testis, or of suppuration in the perineum or the anterior abdominal wall. In a large majority of the cases collected by Hertzberg the drain-tube and sutures were removed on the fifth or sixth day, and the patient was able to leave his bed at the end of the first, or the beginning of the second week. The average duration of the stay in hospital was a little over sixteen days. In this respect Volkmann's operation seems at first sight to compare unfavorably with injection of iodine. The usual duration of hospital treatment by the latter method is from eight to ten days, but, it is pointed out, injection is very often followed by tenderness and swelling of the scrotum and effusion into the vaginal cavity, which may last for weeks, and even for months. All the patients treated by incision and drainage at Tübingen were discharged as cured, and the primary results were all very favorable. By subsequent inquiry and observation Hertzberg has made out that the benefits derived from the treatment have been maintained, and that forty-five out of forty-seven hydroceles treated by cutting operation have been permanently cured. By comparing tables, derived

from different sources, of carefully recorded and long observed cases of hydrocele treated by incision and injection, he finds that the relapses after the former treatment constitute from three to four per cent. of the total number of cases, while those after treatment by puncture and injection of iodine amount to eight per cent. In conclusion, Hertzberg expresses it as his opinion that incision is the most rational method of treating hydrocele, especially with regard to the certainty of obtaining a permanent cure, and that in future it will be more frequently practised, as the appreciation of the value of antiseptic surgery becomes widely spread.—*London Med. Recorder.*

DISEASES OF THE EYE AND EAR.

Creolin in Ophthalmology.

DR. O. PURTSCHER, of Klagenfurt, gives in the *Centralbl. f. pr. Augenheilk.* his results obtained with creolin in the treatment of diseases of the eye. A one per cent. solution dropped on the conjunctiva of a normal eye produces a sensation of severe burning, which results in the eyelids being closely pressed together.

This, however, is only momentary, the lids are soon reopened and large tears flow forth. After three or four minutes the irritation will have subsided entirely, save for a slight conjunctival irritation, which also soon passes off. Hence the author recommends the use of cocaine before the application of creolin.

1. In simple conjunctivitis, the results, as a rule, were good, especially in congestive catarrh, and in those forms complicated with inflammation of the corneal margin.

2. In conjunctivitis phlyctenulosa, the combined results of creolin with

cocaine were admirable, especially in photophobia and scrofulous blepharospasmus.

3. Success was most marked in the papillary form of trachoma, the author having never seen such marked resolution of the papillæ from caustic treatment, as from that by creolin.

4. In blennorrhœa of the lachrymal passages, improvement was observed in many cases.

5. In all forms of keratitis with ulceration, the deep ulcers healed rapidly; also ulcers with small hypopion stood the creolin treatment admirably.

6. In parenchymatous keratitis the vascular growth was speedily arrested.

The author concludes that creolin is a powerful and valuable antiseptic, and at times to be preferred to the sublimate. It possesses another advantage in being non-poisonous, a fact which has lately been demonstrated by Dr. Eisenberg.—*Cent. f. d. ges. Therap.—Medical News.*

Creolin in Eye Diseases.

DR. J. H. THOMPSON, of Kansas City, Mo., in a communication to the *Kansas City Medical Record*, says that for many years, in certain diseases of the cornea, he has used powdered iodoform and the ointment, which are introduced into the eye two or three times a day in sufficient quantity to bring the antiseptic in immediate contact with the ulcer. In other cases he has had recourse, sometimes exclusively, sometimes in conjunction with the drug mentioned, to an application to the inverted lids and cornea of a solution of the nitrate of silver (1 to 40). The result of this treatment, prolonged two or three months, has been nearly always satisfactory; but to obtain a radical cure it was often necessary to continue the treatment three or four months. He says he has found cases, however,

in which this treatment has given but incomplete results; the inflammation diminishes, the functional troubles disappear almost entirely, and the patient is satisfied, believing himself cured; yet when the cornea is examined through a strong lens, small ulcers are seen on its surface, showing that the epithelium has not been completely reproduced. These ulcers, under certain special conditions, may occasion a relapse. Under these circumstances, it is imperative that we should seek other remedies which can more completely and certainly destroy the micro-organisms in the cornea.

It is in these cases that he has tried creolin, and he expresses himself as much pleased with it. At present he only speaks of its healing virtues in two cases.

Creolin is a product of the decomposition of coal-tar. It comes now as a brownish liquid, very complex and very impure. It smells like tar, and it is slightly irritating to the cornea, as all the phenols are, for it is strongly acid and slightly caustic. It is probable that before long it will be purified, when it will be as neutral as vaseline, and will then be of even greater value to the ophthalmologist than it is now. Its antiseptic properties are undoubtedly superior to all other drugs at our command.

Dr. Thompson uses creolin in the following manner. A solution is made of: \mathcal{R} . Creolin, gr. iss; aquæ destil, \mathcal{M} cl. With a brush dipped into this solution he touches the ulcers once or twice a day, after anesthetizing the eye with cocaine. Sometimes he uses a spray of creolin.

Granular Eyelids.

A valuable ointment for this condition is composed of two grains of the yellow oxide of mercury to one-half ounce of simple ointment.

THE AMERICAN MEDICAL DIGEST.

PART III.

Diseases of Women and Children
and Obstetrics.

DISEASES OF WOMEN.

The Treatment of Fibroid Tumors of the Uterus by Galvanism.

DR. FRANKLIN H. MARTIN, in an able article published in the *Journal of the American Medical Association*, gives the following summary.

1. A means of generating a continuous current of electricity of steady and uniform character, that can give an actual current strength through a resistance of 200 ohms, of 500 milliamperes, is necessary in order to obtain all the benefits of this treatment.

2. Fibroid tumors of small size can be completely absorbed by the proper application of strong currents of galvanism.

3. Hemorrhages from hemorrhagic fibroid tumors can be promptly cured by the local coagulating effect of the positive pole when it is applied intra-uterine. Severe neuralgias so often accompanying these troubles can invariably be relieved by three or four applications of this treatment.

4. When the cervical canal cannot be entered by any form of intra-uterine electrode, flexible or otherwise, after repeated trials, a negative galvano-puncture should be made into the presenting part of the obstructing mass of the tumor, and an artificial canal opened, which is to take the place of the impenetrable uterine canal in all subsequent treatment.

5. The intra-uterine electrode should in all cases be negative, unless there is hemorrhage or excessive leucorrhea, when the positive pole is always required. The same patient, may, however, present symptoms demanding the use of both poles at successive operations.

6. The strength of the current should depend entirely upon the amount of active surface of the internal electrode,

and should be 25 milliamperes for each sq. cm. of active surface in actual contact with the endometrium. If more is used the concentration of the current will be sufficient to cause troublesome cauterization, if less is used the concentration at any one point will not be sufficient to cause the necessary coagulation for checking hemorrhage.

7. The duration of the treatment should be five minutes of the maximum current required.

8. The number of operations is necessarily dependent upon and influenced by the result to be accomplished. A severe hemorrhage can be checked, and symptomatic relief can often be accomplished by four or five séances, while a general reduction of the tumor necessitates many operations, varied of course, according to the size and location of the growth. In some cases of large multiple tumors, a relief of symptoms, or symptomatic cure, must be accepted as a substitute for an actual cure.

9. The operation should be intra-menstrual, if possible; if hemorrhage is continuous, however, operate during flow. The séances can occur as often as every day with the system of concentration adopted, that enables one to attack different portions of the canal at succeeding treatments, or it can be given with advantage as few as once a week.

10. Since the adoption of the flexible intra-uterine electrodes and Apostoli's vaginal galvano-puncture, extra-uterine puncture should be regarded, if at all, only as a last resort.

11. Galvano-puncture needles, and the internal electrodes, should be constructed of material that is not injured by coming in contact with strong carbolic acid, or 1:1000 bichloride mercury solution. All internal electrodes should be thoroughly scrubbed with a nail brush and soap and water after each

application, and allowed to remain in one or the other of these standard antiseptic solutions until they are to be employed again, when they should be washed in a weaker solution of the same before using. Before a vaginal puncture is made the vagina should be thoroughly wiped out with a 1 to 3000 bichloride solution.

12. There is no excuse for any percentage of mortality in the proper application of this treatment. While Dr. Apostoli has had two deaths in 275 cases, he candidly admits they were due to avoidable accidents, rather than to any legitimate procedure of the operation.

13. In experienced hands, and by the adoption of the present means of concentration, the most delicate and sensitive patient can receive, without experiencing any severe discomfort, all the benefits to be derived from this valuable treatment.

Action of Ergot on the Uterus.

DR. LOMBE ATTHILL, in a communication published in the *Dublin Journal of Medical Science*, says of ergot that it is most uncertain in its action and in its effects. In some cases it causes pain, and when it does it always, he thinks, lessens hemorrhage from the uterus, the pain being evidently due to clonic contraction of the muscular fibres.

But sometimes the same dose of the same preparation which caused pain previously, does not do so on another occasion, though apparently no change has taken place in the patient's condition. Dr. Atthill thinks that ergot will not induce clonic contraction of the uterine fibres unless something acting as a foreign body is present in it. The mere presence of a foreign body is not sufficient ; it must be acting.

Pedunculated polypi, he says, are commonly enough met with in the uterus, but their expulsion by painful uterine action is quite rare and it is most likely that the seat of the tumor is the main element of its tendency to excite uterine action. The portion of the uterus between the entrance of the Fallopian tubes is the sensitive portion of the organ, and, in his opinion, it is necessary for a tumor to be situated there for it to act as a foreign body.

He regards it as very doubtful if ergot ever originates clonic contractions of the uterus during pregnancy, unless the organ is prepared by some pre-existing cause to expel its contents. When engaged formerly in midwifery practice he was in the habit of frequently prescribing ergot as a preventive to post partum hemorrhage, commencing its administration a week or ten days before the expected advent of labor, and he says he has never once had reason to suppose that it hastened that event ; on the contrary, in several instances the period of utero-gestation seemed to be lengthened. In like manner, in cases of a threatened abortion, he has seen the hemorrhage checked, and pregnancy proceed normally under the administration of ergot ; it seemed, indeed, to act as a uterine tonic, if such an expression be admissible. In others, and perhaps the majority, it seemed to produce no effect at all ; in a few it induced clonic spasms, but in these there was always reason to think that the ovum was already blighted. In cases of uterine fibroids, he says, ergot will, in general, be found to act most beneficially in lessening hemorrhage when the tumor is imbedded in the muscular tissue, and as thinning of the wall takes place, and as the tumor consequently comes in closer contact with the uterine mucous membrane, the result of its

administration will be less satisfactory ; but in all cases much will depend on the preparation used and upon its freshness.—*Medical and Surg. Reporter.*

Alexander's Operation.

IN the correspondence of the *Medical and Surgical Reporter*, we note the following, which is a résumé of the work done by Professor POLK, of New York City :

The effect of shortening the round ligaments is to draw the uterus upward and forward, so that the fundus can be placed directly behind the symphysis pubis. Consequently the operation is indicated in procidentia. This is the joint result of rupture of the perineal structure and stretching of the uterine ligamentous supports, chiefly uterosacral, and the basic lines of the broad ligaments. The principal perineal support is the pubo-coccygeal division of the levator ani muscle.

Prolapse is usually accompanied by backward displacement and hence Alexander's operation corrects both conditions, and then, when supplemented by restoration of the pelvic floor, it is both rational and satisfying. Among other indications are retroflexions and retroversions of the uterus, in which the organ can be placed in the normal position by the sound, and yet a pessary cannot be comfortably worn. So long as the uterus cannot be replaced easily, it is outside the domain of the operation, and the only alternative is abdominal section, tearing up the adhesions and removing the tubes if necessary.

Another indication is prolapse of the ovary, provided it is reducible and not large enough nor diseased enough to require removal. The objections raised, that sometimes the ligaments cannot be found, and that they are not strong

enough to hold the uterus, are unfounded. Dr. Polk, in more than half a hundred operations, has never had the slightest trouble in finding them, and experiment has proved that they are capable of supporting four to five pounds or more. So far as he has had opportunity to observe, the shortening does not interfere with pregnancy. One of his cases went to term and another is now pregnant and soon to be confined.

As to danger, he thinks that, with thorough cleanliness and antisepsis and a knowledge of the anatomy of the parts, there is practically none. Up to January 1, 1889, he had operated on fifty-five cases—more than any other man in America has performed. His results have been uniformly good, and only in one case had the malpositions recurred.

The Medical Treatment of Epithelioma of the Cervix Uteri.

FROM a clinical lecture by Professor WM. GOODELL, published recently in the *College and Clin. Record*, we extract the following :

First, with reference to the use of morphia. The physician who withholds morphia from a patient suffering pain from a cancer, is cruel. Usually, no pain is experienced until the disease reaches the internal os and invades the body of the womb. Then the woman may suffer the tortures of the damned. The most terrific pain, the most acute suffering that I have ever seen was in a woman, with cancer of the womb, who, the day before she died, took thirty-five grains of morphia by the mouth, and even this gave but little relief. It is the duty of the physician to allow the patient to have as much morphia as is needful to make her comfortable. She has but a few months to live ; why not make them as free from suffering as

possible? I begin with suppositories, sometimes first using belladonna, but more frequently opium. When these have to be repeated more frequently than is convenient, I resort to morphia by the mouth, giving small doses and gradually increasing as necessary. If an interval of two hours is allowed to elapse between each dose, there is no danger of doing harm. When her end approaches, give her an easy death—euthanasia as the ancients called it. Ergot and arsenic are also of service in the general treatment of this cruel disease. Ergot causes contraction of the uterus and tends to lessen the rapid growth of the cancer, by diminishing the supply of blood. Arsenic certainly does tend to repress malignant diseases, and cures of cancer from its use have been reported. If there has been loss of blood, there is no objection to giving iron.

There is one local application which I have found of service in cases of epithelioma of the cervix, and that is fifteen grains of bi-chloride of mercury dissolved in one ounce of collodion. I am sure that in one case I effected a cure by this application, after the amputation of the cervix.

When the cancer has not advanced too far, and the womb is movable and not fixed by the disease, the best treatment is the radical one of removing the whole womb by vaginal hysterectomy.

The Action of Certain Drugs on the Utero-Ovarian System.

THE great majority of females are under the impression that no medicine of any kind should be taken during the continuance of the menstrual flow, and that to take even a mild purgative would be injurious, and many practitioners share in this unfounded prejudice. Dr. LOMBE ATTHILL (*Medical Press and Circular*) believes that none of the

ordinary remedies taken in moderate doses produce any effect on this function, with the exception of drastic purgatives, which, when taken in large doses, seem to increase the menstrual flow. In considering the action of drugs in cases in which menstruation does not appear at all, or very irregularly, in sufficient quantity, or is unduly profuse, the question arises, Does ergot, savin, quinine, or even strychnine, in medicinal doses, produce any appreciable effect on the muscular fibres? To this question Dr. Atthill appears inclined to give a negative reply. He states that he has employed quinine, strychnine and ergot, combined with other drugs, and he feels satisfied that these three of the most potent of the so-called emmenagogues have no appreciable effect on the unimpregnated uterus in its normal condition.

With reference to the action of drugs in cases in which menstruation is too profuse, or in which actual uterine hemorrhage occurs, he holds that the medicines known as astringents may at once be discarded, and he believes that the administration of tannin, tannic or gallic acid, or any other astringent, is worse than useless. The mineral acids, according to his experience, are of no great value, and while doses of the tincture of the perchloride of iron have in his hands been of use in checking the flow, it was always in anæmic women, and its beneficial effects were probably attributable to the iron it contains. Ergot is the only drug on which any reliance may be placed. The American fluid extract is, according to him, the only trustworthy preparation; even this drug, however, is most uncertain in its action; in some cases it causes pain, and, when it does, it always lessens uterine hemorrhage, the pain evidently being due to the clonic contraction of

the muscular fibres. He further states that it is very doubtful if ergot will originate clonic contractions of the uterus, unless the organ is prepared from some pre-existing cause to expel its contents. In cases of uterine fibroids, ergot will, in general, be found to act most beneficially in arresting the hemorrhage when the tumor is imbedded in the muscular tissue, and that as thinning of the wall takes place, and as the tumor consequently comes in closer contact with the uterine mucous membrane, the result of its administration will be less satisfactory. Permanent of potassium, much lauded as an emmenagogue, has been extensively employed by him, and always without result.—*Therapeutic Gazette.*

Hypertrophied Hymen, with Absence of Uterus and Appendages.

THE *British Medical Journal* recently published the history of a case reported by Dr. J. H. NEALE:

More than a year ago a girl, aged twenty four, was brought to my outpatient room at the infirmary by her mother, who stated, with great candor, that her daughter had recently been discharged from her situation as house-keeper to a farmer in the country; and as she "had not seen any thing," she was anxious to know "if there was any thing the matter." I formed my own conclusions as to the purport of the inquiry, and first examined the breasts, the condition of which negatived the presumption of pregnancy.

Further questioning elicited the fact that the girl never had menstruated, so, with the mother's consent, I made a vaginal examination. The exploring finger encountered a thick fleshy diaphragm, which completely occluded the vaginal orifice. I found, however, that this membrane could be easily pushed

in front of two fingers, as far as the latter could reach.

I thoroughly examined the membrane by drawing it outwards with a pair of forceps.

About the centre was a reddish, umbilicated prominence, pointing to the existence of a possible small opening; but with the aid of the finest probe no such opening could be detected.

By bimanual examination, I found that the inside and outside fingers met behind and above the bladder (which had been previously emptied) with nothing between them but the membrane in question and the anterior abdominal wall. Had the probe been roughly used, or a sharper instrument employed, it would undoubtedly have entered the peritoneal cavity.

I explained the defective anatomical condition to the mother, adding the advice that if ever her daughter were sought in marriage, the fact ought not to be concealed that she could never bear children. The explanation was apparently so satisfactory that neither mother nor daughter again appeared.

Chronic Metritis.

IN a clinical lecture by Professor W. W. WEBBER, of Detroit, Mich., the following points were brought out:

If we are fortunate enough to be called in when there is simply a condition of hyperæmia and can remove the cause, we may hope in a few months to afford decided relief, if not a positive cure. To effect this we combine constitutional and local means. The bowels must be carefully watched, for there is nothing that will so effectually dam up and throw back upon the uterus its blood as a loaded colon. The digestion must be improved if it is impaired. A moderate amount of exercise by

walking, or what is better still, a thorough massage, to maintain as robust a condition as possible, should be ordered at least three times per week. Tonics, when needed, should also be prescribed. In the local means we derive great benefit in a thorough and systematic douching of the uterus with hot water from two to three times per day. Local depletion by scarification once in ten days is also beneficial. This local depletion can be made more thorough by tampons saturated with glycerine. The second state, or that of hyperplasia, where a proliferation has taken place; where there is an increase of the tissues that build up the womb, or in the chronic stage of subinvolution before the third stage sets in, treatment is less promising and needs all that is possible of favoring circumstances to be in any measure successful. If the woman is near the menopause the atrophy that results from the cessation of function will do more, and that more speedily, than all the artificial means we can devise. If she is not, we can only hope, with strenuous efforts on her part to aid us, to accomplish something in a long course of time. Months are not to be considered, years can only be spoken of, if you wish to deal honestly with your patients.

To the treatment already given for the first stage you can add a systematic course of tamponment of lamb's wool so applied as to support the uterus and at the same time exert an equitable pressure upon its walls. This can only be done satisfactorily with a Sims' speculum. Tampons of proper size can be pressed up into the anterior and posterior cul-de-sac so as to make, from the elastic nature of the wool, an equitable pressure upon a large portion of the uterus, thereby stimulating the lymphatics, supporting the debilitated

blood vessels, and promoting absorption the same as we do by pressure in other parts of the body, but from the nature of the parts by a much slower process. Uterine massage can be applied here with advantage. Electricity is another agent to bring about the same results that will in time become more universally and more scientifically used.

Our books interdict sexual intercourse in all uterine diseases. If the woman be of an ardent temperament it is better for her to indulge in moderation than constantly burn with desire. The congestion from ungratified passions is greater and more harmful than that arising from a moderate indulgence. In this trouble, lasting as it does for a long time, it is impossible to order total abstinence without creating domestic discord. In the third stage, all therapeutics and appliances failing to afford much or any relief, we have then a relative increase of connective tissue. This presses down upon the blood vessels, diminishing or destroying them, and then the organ contracts into a hard, firm mass, and we have the condition of sclerosis.

The Cause and Treatment of Urethrocele.

DR. T. ADDIS EMMET (*New York Medical Journal*):

This condition is always found to exist, to a greater or less extent, in those cases presenting a serious double laceration of the cervix, and is most marked in women who have borne many children. So-called laceration of the perinæum is a common co-existing condition, but does not in any way stand in a causal relation to urethrocele. The term should be confined to the condition produced by actual injury to the urethral canal, leaving it sacculated and shortened, but not necessarily patulous. It is caused by pressure by the

child's head during labor, the urethra being dilated by the forcing of the loose tissue about the neck of the bladder into its lumen, resulting in partial or complete displacement of the mucous membrane and submucous tissues along the lower portion of the canal. Lacerations, both longitudinal and transverse, of the urethral mucous membrane often occur as well. Often the passage of the probe will reveal the fact that the diameter of the canal is greater than its length, but it becomes so obstructed by prolapsed tissue from the bladder, or by its own thickened and diseased mucous membrane, that an actual impediment to the passage of the urine exists. Moreover, a pouch is often left by the cicatrization of each end of a laceration, permitting the retention of a portion of urine and irritation from its decomposition. Reflex symptoms are common attendants on the lesion.

The treatment, applied with success in a number of cases, has been the removal of all redundant tissue through a "button-hole" made in the middle third of the urethra, the mucous membrane of which is to be then united by sutures to the edges of the incision in the vagina after the length of the canal has been restored by traction applied to the two extremities of the incision. This opening is to be left until the normal condition of the mucous membrane of the urethra is restored, and may then be closed after the same manner as a fistula.

The Corset Question Again.

LOWENFIELD (*Jour. of Psychol.*) has attacked this subject from another side:

He finds that the relative diameter of the cerebral blood vessels, per 100 grammes of brain, is in some cases nearly twice as great as in others, and that it increases with increase of age ;

and he draws the natural conclusion that the capability of continuous mental exertion and the development of talent must depend very largely upon this factor. These three facts are not without a connection. A large amount of food is necessary for the production of a large amount of energy. But the amount of food which the human machine can transform into work depends upon the breathing capacity of the lungs, and that depends upon the amount of air which can be supplied for its combustion, and that depends upon the wearing or the not wearing of corsets. With a generous supply of blood, the proportion of it which can be turned in upon the brain is very variable, and must be capable of being largely influenced by habit. Hence the amount of intellectual work which can be done by woman it is within her own power to regulate, to a much greater extent than might have been supposed possible. It has been noticed that college women have largely given up the wearing of the corset, and it is doubtless a custom that will become more and more widespread ; it would seem strange that any one should care to pour into himself intellectual food at the same time that he carefully shuts off the draught of his furnace and so prevents its utilization.—*Polyclinic*.

DISEASES OF CHILDREN.

The Causes of Irregular Positions of the Teeth, and the Significance of Rachitis in that Respect.

DR. ENGELSEN (*Archiv. Pediatrics*) :

The author studied one hundred and forty-nine casts of jaws in which the teeth were irregularly set, and some additional cases in which the jaw showed marked rachitic changes, without irregular setting of the teeth. In sixteen

cases, the cause of the irregularity was persistent milk teeth, in four cases there were superfluous teeth, in thirty-one there was irregular arrangement for which no cause could be given, in ninety-eight the peculiar changes of rachitis were present, and in all of them the teeth did not have sufficient room for proper development.

The teeth which were most commonly out of place were the two large incisors, which, in consequence of lengthening and lateral compression of the jaw, were projected strongly forward and inward. The most marked evidence of rachitis consisted in a bending inward of the upper jaw near the second small molar; the evidence which was next in frequency was a high and narrow palate. In fourteen of the seventy-five cases in which there were undoubted indications of rachitic changes in the jaws, rachitic changes in the teeth were also present. In the twenty-three other cases the bending of the jaw and the deformity of the palate were not sufficiently pronounced to serve as diagnostic symptoms. On the lower jaw the most frequent change was that which gave it a short and polygonal appearance. In thirty cases the lower jaw was bent inward at the second bicuspid. It would seem that about half of the irregularities in the disposition of the teeth were due to rachitic changes.

Studies Concerning Rachitis.

THIS monograph upon a most important subject is a *résumé* of the vast deal of work which has been expended upon the subject.

1. The idea which the disease rachitis represents.

In spite of much investigation the pathogenesis of this disease is still obscure, but notwithstanding great differences of opinion the disease is recog-

nized with considerable uniformity as a chronic constitutional disease which pertains eminently to childhood, the necessary symptoms of which are certain peculiar changes in the developmental process of the skeleton, these changes being accompanied by a series of functional disorders in the nervous system, the digestive canal, and the respiratory system. Acute rachitis, in which all the bony lesions are developed in the course of a few weeks, has been described and defended by a number of authors as a separate variety of the disease, but others regard such cases as probably not rachitic, the only true form of the disease being the chronic one.

2. The nature of rachitis.

This is a disease of childhood. It may arise during fetal life, but that is exceptional. Kehrer, Bohn, and others recognize a fetal and a congenital form, both beginning during fetal life. These two forms differ only in the fact that the former is cured during fetal life. The congenital form includes cases in which rachitic symptoms are present in the new-born child, either in their incipiency or in full development. It is of much more common occurrence than the fetal form, and may begin at any period of fetal life. The evidences of rachitis in the new-born were found by the author, in the investigation of a large number of children, in the following relative frequency: enlarged fontanelles, soft and impressible cranial bones, breast rachitis, rachitis of the lower extremities. The approximate age at which rachitis occurs was determined by an analysis of one thousand cases of the disease which were recorded at the children's polyclinic in Christiania. The result of this analysis was that 47.6 per cent. of the cases occur during the first year

of life, 42.1 in the second, and 7.4 in the third. A comparison of the statistics with those of Denmark, Germany, France, and England shows, in brief, that the very large majority of all cases which are brought to public institutions for treatment appear for the first time between the ages of six and eighteen months. It must be remembered, however, that in most of these cases the disease was well advanced when seen for the first time, so that the determination of the time when it began is far from accurate.

Cases are recorded in which the disease has developed as late as the eleventh and sixteenth years. These are extremely exceptional, and the opinions of Boerhaave, Ritter, Rehn, and Kassowitz may be considered reliable that it does not occur, as a rule, after the third year. As to the frequency of the disease, of 7369 sick children in Christiania, 1000 were rachitic, 13.5 per cent. Of those who were sick in the first three years of life, 19.94 per cent. were rachitic. In Berlin the proportion is about 25 per cent; in Frankfurt and Dresden, 25; in Prague, 8.64. In Vienna, Kassowitz found 10.5 at his polyclinic, 26.2 of those who presented themselves for vaccination, and 59 in his private practice. In London, 2.36 per cent. of all children treated in the hospitals were rachitic, and 30.3 of all hospital cases under two years of age. In Philadelphia, Parry reported 28 per cent. of all children between one month and two years of age as rachitic. In Athens, Rehn found only one rachitic child among 1500 sick children.

Whether this disease is or is not a constitutional one is an important question, and must be decided in the affirmative if one is guided by the presence of several important symptoms, and also the fact that the skeleton, the

digestive and respiratory tracts, the skin, nervous system, spleen, etc., are implicated. Whatever system or apparatus may be involved, the condition is usually one which is identical with or analogous to the chronic inflammations.

3. The causal conditions of rachitis.

The great frequency of the disease suggests the possibility that it may be inherited. Many cases are recorded in which it appears to have been such, and the authority of such names as Niemeyer, Steiner, and Hennig supports the doctrine that it is inherited to a great degree. Jenner, Baginsky, and Kassowitz hold a contrary opinion. Its exact relations to syphilis do not seem to have been definitely determined. Parrot believed that it was a direct derivative of syphilis. Baginsky has found evidences of syphilis in six per cent. of all rachitic children. Other writers see strong evidences of relationship in the symptoms of the two diseases, while others deny that they are at all allied.

The same uncertainty exists with reference to the interdependence, in an etiological sense, of rachitis and tuberculosis. Bad air is one of the most important factors in its production. It is much more common in northern latitudes than in the tropics. Bad hygienic conditions in general may be considered the most important elements in its causation. Parrot has stated his views in reference to the causes of the disease in the following propositions:

1. Defective means of nutrition in new-born children is an efficient cause of rachitis.

2. By defective nutriment is meant any nutriment exclusive of mother's milk before a child is a year old.

3. The nutriment is also defective when it is given too often, or when the nurse is unhealthy.

4. The surest means for producing rachitis in a baby are the use of gruels, bread soups, and other similar articles of diet.

5. The disease is frequently caused by the use of nursing-bottles with long tubes.

6. The same is true of a mixed diet.

7. Too early weaning is also a cause.

As to sex, statistics seem to indicate that boys are more frequently the subjects of this disease than girls, though this is probably not so in congenital rachitis—*Arch. Pediatrics*.

The Regulation of Heat in New-Born Infants.

IN this work the author has given a summary of all that science has thus far adduced upon this subject. The opening paragraphs refer to the thermic economy of the fetus, the temperature of the fetus at birth, and the regulation of heat during the first week of life, in conformity with the views of Baren-sprung, Schäfer, Wurster, Sommer, Lépine, Jacobi, Bonner, Preyal, Luys and others.

The researches of Baren-sprung and Schroeder have called attention to the fact that the pregnant uterus has a higher temperature than the non-pregnant one. Cohnstein and Fehling have found this a means of deciding whether the fetus is alive or not, the temperature of the uterus being higher than that of the vagina when the fetus is living. During the first few days of life there is a decided fall in the temperature, and W. F. Edwards has concluded that new-born children have a great tendency to become chilled rapidly. Baren-sprung found that a new-born child lost 0.83° after its first bath, but on the following day the loss of heat after the bath was only 0.5° . Children who are born prematurely have

a lower temperature than those who are of good constitution and are born at term.

Investigations concerning the conditions of heat during the second week of life have not been abundant, chiefly for the reason that in maternity and foundling hospitals the children are not so available for experiment as during the first week. Schütz and Eröss have found, however, that new thermic conditions were inaugurated during the second week; Loechner holds that only in the fourth month are those factors modified which determine the thermic economy. Demme states that after the first year of life the thermic oscillations are less decided, the temperature is more independent of external influences and begins to be governed by the same rules which obtain in the adult.

During the epoch of dentition the thermic constancy is decidedly disturbed, and there are frequent deviations from the normal physiological curve. Concerning the physiological thermic curves during the first period of infancy, the author closes the first portion of his work as follows:

The fetus in utero produces heat autochthonously, as is shown by an examination of the fetal products of material exchange, and especially by the increase of carbonic acid in the efferent umbilical vessels. There is still uncertainty, however, as to the method of determining this autochthonous production of heat, which constitutes the difference in temperature between the mother and the fetus. After birth, in consequence of the comparative chilliness in the surroundings of the child, there is a decided lowering of the temperature. Between the fourth and sixth days of life there is apparent in robust children a decided fluctuation in the daily thermic curve.

In the second part of this work the author speaks of the thermic mobility during the first few days of life, and in connection therewith examines: 1, the pathological conditions of the decline in temperature; 2, the insufficient alimentation and the frequent introduction of food as the cause of the decline in temperature; 3, the consecutive action of the two factors which determines the course of the temperature as a cause of the decline in the temperature; 4, the volume of the body as a cause of decline in the temperature; 5, the dispersion of heat by the skin as a cause of mobility in the temperature of the body; 6, the incomplete development of the apparatus which regulates the body temperature as a cause of thermic mobility.

All the questions relating to these propositions are discussed, and a great number of cases in the author's personal experience cited in proof of the positions which he seeks to establish. As a profound disquisition upon the subject in hand this work is to be highly recommended.—*Archiv. of Pediatrics*.

Apparatus for Resuscitating Asphyxiated Children.

THOSE who have had the task of resuscitating asphyxiated children know full well the amount of labor and perseverance which it involves. At a meeting of the Obstetrical Society of Boston, Dr. DOE showed a diagram of Dr. Egon Braun's apparatus, which we reproduce.

It consists of a wooden box, with a slanting top which opens on a hinge, and is air-tight, except for an opening which is partially closed by a rubber diaphragm. The diaphragm has an opening intended to be filled by the nose and mouth of the child. The child sits in a plaster mould, with head thrown far back, so as to bring the nose and

mouth against the opening in the diaphragm. A long flexible tube is inserted at the lower portion of the front of the box for exhausting the air, and posteriorly is a screw for raising or lowering the plaster mould according to the size of the child. After the mouth of the child is cleared of all mucus, it is placed in the mould, with only the mouth and nose visible at the external opening in the diaphragm. Air is first blown into the box by the mouth of the operator, so as to compress the chest, then it is let off and the air exhausted

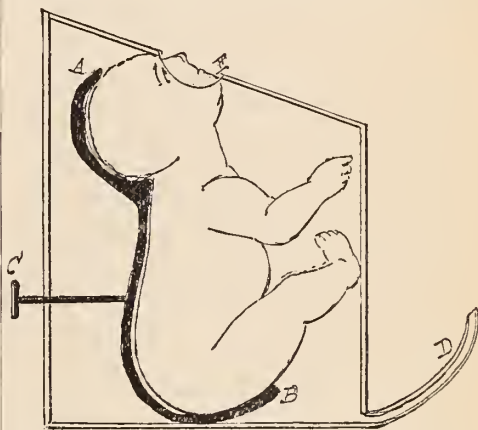


Fig. 12. AB—Plaster Mould. C—Screw for Elevating Mould. D—Pipe for Exhausting Air. E—Rubber Diaphragm surrounding Nose and Mouth.

by suction, thus expanding the chest. This is repeated twenty or thirty times in a minute. Dr. Braun says that he has employed this apparatus in fifty cases, and they have all been successful.—*Boston Medical and Surgical Journal*.

Birth Palsies.

DR. GOWERS (*Lancet*):

This term is preferred by the writer to the more vague one of "obstetrical paralysis."

Palsies of spinal origin are exceedingly rare. One is recorded in which the cord was lacerated by a French midwife using traction in a foot presentation.

There are, then, two main classes of birth palsies, the peripheral and the cerebral.

The most common varieties of the former are that affecting the upper arm and that of the face. The facial nerve is injured only by the forceps; the nerve being compressed just as it emerges from the bony canal, all parts of one side of the face are motionless. The nerve injury is rarely severe, for the parts recover in almost all cases after a few days or weeks. The injury to the nerves of the arm may be associated with fracture of the humerus; such paralyses are irregular in their distribution, varying with the nature of the injury. In other cases and more commonly the injury is inflicted at one spot, just in front of the edge of the trapezius. This may be due to the forceps, the traction hook, or the finger employed in extracting in breech cases.

The muscles which suffer in such cases are the deltoid, biceps, and supinator longus, with sometimes the infra and supra-spinatus. This is called paralysis of the "upper arm type" by Erb, who first described it, and pointed out the relation of the lesion to the spot injured.

Wasting with the reaction of degeneration in the paralyzed muscles follows severe injuries, but in most cases the paralysis is not permanent.

Cerebral palsies are more common and more likely to be lasting. In most cases there is a history of difficult labor, often the forceps being used; in many instances the head shows externally unmistakable signs of the compression it has undergone. Convulsions sometimes occur in the first few days, showing a morbid state of the brain; these may be general or local, and in the latter case may have been accompanied by distinct loss of power. Most of these

children are first-born. This was the case in sixteen of twenty-six cases, which is three times the common frequency. In the remaining ten cases the head in six was born last. In two of the remaining four cases there was great difficulty in delivery.

All of these facts suggest strongly that the symptoms result from injury to the brain during birth.

The results of the investigations of Dr. Sarah J. McNutt are quoted with reference to early post-mortem appearances. Extravasations are found on the surface of the brain, the layer being usually thickest over the central region. The cortex may be lacerated. In some cases the extravasation occurs at the base, and then the cerebellum is usually lacerated, the blood coming apparently from its vessels.

The condition found in children who die later in life is an atrophy of the convolutions in the central (motor) region. The cortex here is depressed often to the same degree upon both sides of the median line; the depressed convolutions are small and indurated less than half the normal size.

Symptoms.—There is often a bloody tumor of the scalp, indentation of the skull, or some other external sign of injury. Resuscitation may be difficult. General convulsions or general rigidity for some days are rarely seen, because cases with severe lesions do not live long. In the milder cases no special defect is noticed in early infancy, and when the child is old enough to walk or talk the symptoms are first noticed, attention being called to the limbs. They are frequently found rigid, sometimes in flexion, sometimes in extension, sometimes in strong adduction. The trouble in the arms is usually of a different type, there is inco-ordination, and spontaneous movements are some-

times slow and athetoid in character, sometimes resembling chorea, and more rapid. Voluntary movements are interfered with by the spasm and the incoordination. There may be complete immobility of one or more of the limbs.

The muscles of the neck and trunk are weak, so that the head cannot well be supported or the child sit upright.

Deglutition occasionally is interfered with, and also articulation may be. Internal strabismus is often present. Mental defect exists in more than half the cases. There may be idiocy. Usually the symptoms are bilateral, but not necessarily so. They may be hemiplegic in type, the arm being the worse. More often the legs are only or chiefly affected. The symptoms then resemble spastic paraplegia, differing from that due to disease of the cord in that there is more adductor spasm.

Recurring convulsions are not common, but they may be present, and the patient become epileptic.

The preponderance of symptoms in the lower extremities is explained by the fact that the lesion is more marked near the longitudinal fissure and in the paracentral lobule. It is rare that all the cortex cells here are destroyed, and hence some power of motion is usually present. The arm-centres lying further away are less compressed.

Diagnosis.—The important points to establish are that there is no history of definite onset after birth, and that the disease is not progressive. Birth palsy is rarely strictly unilateral, which will suffice to distinguish it from "acquired" hemiplegia; moreover, the latter usually comes on with distinct and well marked symptoms.

From spastic spinal paralysis it is differentiated by discovering that in birth palsy the hands, on close examination, will be found more or less affected.

The author has never seen in a young child a primary chronic chord lesion such as in adults often produces a condition of the legs resembling these cases of "congenital paraplegia."

When the lesion is slight and the child able to walk, the awkward gait may be confounded with that of pseudo-hypertrophic paralysis. But in the latter disease the contraction of calf-muscles cannot be overcome, for it depends upon structural shortening, while in birth palsy, it is only from spasm of the muscles and readily yields.

There is no trace in birth palsy of the peculiar condition of the shoulder muscles seen in pseudo-hypertrophic paralysis—*i. e.*, large infra-spinatus and defective pectoralis and latissimus dorsi, nor is there lordosis. Lastly, and most important in birth palsy, the knee-jerk is excessive, and cutaneous stimuli excite reflex spasm; in the other disease the knee-jerk is never increased, it may be diminished or lost, and no peripheral impression causes reflex spasm.

Prognosis.—There is no tendency to go on from bad to worse, but, on the contrary, to slow improvement.

In almost all cases where there is not actual idiocy the power of walking is ultimately acquired, although very late, it may be. The more mental the more motor impairment as a rule.

No opinion as to the ultimate condition can be given in a case under two years old, since before this time it is difficult to estimate the amount of the lesion, nor before this can slighter defects be recognized with certainty.

Treatment.—Since the lesion includes destruction of brain tissue, therapeutic measures are limited. Drugs are useless except to control convulsions.

The chief treatment is training the motor powers by gymnastic exercises.

When there has resulted considerable equinus, cutting the tendo Achillis should not be done, for no permanent benefit results. Electricity, whether faradism or galvanism, is useless. Frictions have better results, and should be employed.—*Arch. Pediatrics.*

OBSTETRICS.

New Method for Preventing Rupture of the Perineum in Labor.

DR. CHASSAGNY, Lyons (*L'Union Médical*):

This apparatus is intended for use, not only for cases in which obstetrical intervention is necessary, but in all cases of normal labor. It assumes an absolutely efficacious protection to the perineum.

When the head, having descended into the pelvic cavity and bulged the perineum, arrives at the point at which it begins to receive a forward impulsion, it would become easily disengaged provided no obstacle were offered by the vulva. If, at this moment, we could attach to the perineum some fabric which would be capable of stretching transversely but would be absolutely unyielding in the contrary direction, it is evident that instead of being propelled forward the vulva would undergo an early commencement of dilatation. And this dilatation would be made at the expense of the posterior commissure. Well, as it is the perineum which furnishes the factors necessary for this amplification, it is no less evident that the result of the uterine effort would be to bring about the transversal extension of the perineum and consequent amplification of the vulva, outside of any lengthening process which would, in fact, be made impossible by the fabric of our apparatus which, in this direction, is inextensible.

We are not able by the means indicated to modify so profoundly as we might seem to say, the *actual* physical capabilities of the perineum, but we practice upon the patient, if I may so express it, a point of support which permits us to arrange an artificial perineum in front of the natural organ; and this may be applied with exactitude upon the true perineum in such a way as to allow of its enlargement transversely while opposing its lengthening from back to front.



Two straps of silk or linen, 80 centimetres long and 15 millimetres wide, are provided with a buckle at the extremities; each of these bands is placed well into the groin, with the buckle above. These straps follow downward and are brought up behind in the posterior sulcus. The straps meet just beyond the anus and remain together to an extent of 8 or 10 centimetres, when they separate and are brought around each thigh, the ends being fixed in the buckle with as much tension as may

be necessary to secure the apparatus firmly in place. (See cut.)

Attached to these bands, and taking up about 12 centimetres of their length, are two pieces of morocco, whose edges are brought together by hooks similar to those used in laced shoes and these, being held with elastic cords, will open or close in accordance with the motions of the perineum. They are so placed that the first hooks start at the rectum, the series being prolonged throughout the length of the perineum. When the latter begins to project largely and the head is ready to appear, a piece of soft fabric is placed within the edge of the apparatus in such a way as to overrun its free border by a few centimetres. A rubber thread having a diameter of 4 mm. being fixed upon one of the first hooks in the neighborhood of the rectum is passed over to the opposite hook, and in passing thus from one to the other, an elastic lacing is made in front of the perineum and of the enclosing envelope. The last turn of this lacing passes two or three centimetres beyond the free border of the perineum: it thus prevents antero-posterior elongation, and by its means we avoid that great attenuation of tissue which invites the ruptures so dreaded by physicians. Again, the passage of the head cannot now be made across the border of the perineum itself, but must be made upon the smooth, supple and elastic fabric which is sustained by the elastic threads.

The dilatation of the perineum, which can no longer be made in the sense of elongation or the attenuation of its free border, will be effected transversely only, while drawing upon the loose tissues of the thighs for a portion of the substance required. Consequently, the last portions of the rubber cord which are to oppose the elongation should be applied doubled together,

and secured at a strong tension; a certain amount of play may be given to the inferior cords, which will permit transversal dilatation and, at the same time, favor the movements of deflexion. —*Medical Abstract.*

Hydatids of the Chorion.

IN a communication to the *Medical and Surgical Reporter*, the writer gives the history of the following case exhibited at Professor POLK's clinic :

Professor W. M. Polk, at the clinic at Bellevue Hospital, showed a patient, a domestic, 23 years old, who was sent to the hospital January 17, by a reputable physician, as a case of simple chronic gastritis.

Her history revealed that in the third week of last October she menstruated for three days and then ceased until December 1, after which she flowed profusely, at intervals. On January 1, a small grape-like mass came away with much blood. Nausea and vomiting began early in December, and became so severe that the patient could eat nothing and became very weak. On her admission to the hospital her temperature was 100°, her pulse 112 and very weak, her mouth and tongue brown and dry, and her breath offensive. Physical examination showed a tumor in the pelvis extending up to the umbilicus, of the size and shape of a uterus in the fifth or sixth month, and slightly tender on pressure. The os was not soft, but was dilated enough to admit the end of the index finger. January 19 and 20 more of the grape-like gelatinous masses with a decided odor of decomposition, came away, and the tumor declined in size. Dr. Polk made the diagnosis of hydatiform degeneration of the chorion, differentiating it, chiefly by the length of the history, the appearance of the masses, and by exclusion,

from endometritis, polypus, fibroma, and mole. The os being sufficiently dilated, he emptied the uterus with a double curette, washed it out thoroughly with hot water and packed it with weak iodoform gauze, which was renewed after twenty-four hours. The patient had no fever and is now on the high road to recovery.

This treatment of curetting, washing out with hot water, or 1 to 5000 solution of bichloride of mercury, and then packing with weak iodoform gauze, is one constantly used by Professor Polk in chronic endometritis of the hemorrhagic or fungosum type, in septicæmia from retention of membranes and similar conditions.

Albuminuria of Pregnancy and Puerperal Eclampsia.

DR. LANTOS, of Buda-Pesth, has recently made a series of observations on albuminuria of pregnancy in the wards of Professor von Kézmásky. In over eighteen per cent. of seventy pregnant women he found albumen in the urine, while in nearly sixty per cent. of six hundred newly-delivered women the urine was albuminous. Albuminuria was detected in over seventy per cent. of two hundred and sixty-eight primiparæ, and over fifty per cent. of three hundred and thirty-two multiparæ. The percentage was distinctly lower in premature labor, and fifty per cent. lower in abortion cases.

Out of ten cases where albumen was abundant, so that Dr. Lantos used the microscope, he found pus in three and casts in five, but no foreign elements in the remainder. He examined the kidney in thirty-nine cases where the patients had neither died from eclampsia nor from nephritis. In fifteen of these cases the kidneys were very anæmic, in twenty-one pale, and only in

three full of blood. Among the local changes in other cases he found acute parenchymatous nephritis in two cases, acute hemorrhagic nephritis in one case, parenchymatous degeneration in nine cases, and in four albuminous degeneration.

Dr. Lantos, therefore, concludes that, putting aside all evident and probable cases of nephritis in pregnant women, albuminuria is not rare in pregnancy, and very common after parturition. He refers the phenomenon to reflex irritation of the vaso-motor nerves of the renal vessels; it has no pathological significance, and, in conjunction with other symptoms, is a valuable diagnostic sign of pregnancy. Out of fourteen thousand eight hundred and fifteen labors observed in the course of fifteen years, he noted fifty-three cases (.36 per cent.) of puerperal eclampsia, a ratio of two hundred and seventy-eight to one. Over seventy-eight per cent. out of forty-two eclamptic cases occurred in primiparæ, over twenty-one per cent. in multiparæ; fifteen out of the entire fifty-three died.

Dr. Lantos thinks that the rate of mortality is increased when instruments are used, and as the convulsions often do not cease after delivery, he thinks that the forceps should not be used unless there be strong indications. Convalescence is much prolonged after eclampsia. In twenty-three of the eclampsia cases the urine was examined; in twenty-one it was albuminous, casts being found in four. At the necropsies of fatal cases of convulsion, Dr. Lantos found constant changes in the brain, but only once acute, though frequently chronic, renal changes. Like Osthoff, he traces puerperal eclampsia to violent reflex vaso-motor disturbance, and classes it as acute peripheral epilepsy.—*British Medical Journal*.

PUBLISHERS' DEPARTMENT.

TO OUR SUBSCRIBERS.

The Analyst Publishing Company, who now publish the MEDICAL DIGEST, desire to return thanks to the subscribers for kind forbearance and patience for all shortcomings incident to a change in publishers. We desire to serve all promptly and faithfully, and whenever any thing occurs that seems not to be as it should, if you will just drop us a postal card, we will endeavor to right it or make a proper explanation. We can still supply bound volumes for 1888 on return of the old numbers and \$1 for binding. Back numbers of all volumes but Volume 1 can also be had.

THE ANALYST PUBLISHING CO.,
19 Park Place, N. Y.

Pepsin.

A new and savage fight on the relative merits of pepsin is threatened. Parke, Davis & Co. are issuing a huge advertisement, addressed to druggists, in which they reproduce a report by a Yale professor giving their pepsin over one hundred per cent. more proteolytic power than that made by any other manufacturer. Be that as it may, we notice that some of the pepsins which have been puffed to the skies and advertised pictorially as the best under unscientific tests stand at the very bottom of the list, notably the pepsins of the Royal Chemical Company, North's and Ford's. Next to Parke, Davis & Co.'s the highest place is given to Fairchild's.

Habitual Constipation.

W. J. Maddox, M. D., Washington, D. C., says: In regard to results produced from the use of Acid Mannate, I will give two cases: Case 1, Mrs. N. C., applied to me for treatment for habitual constipation. After trying several remedies without any good effect, I put her on the Acid Mannate treatment. Since taking it she has had marked improvement, and at this date is not troubled with constipation. Case 2, Mrs. F., pregnant, was troubled with constipation. I gave the Acid Mannate, and find that it acted like a charm with her. She, at the present time, is not constipated. Both of the above patients told me that the Acid Mannate operated very mildly. It is the remedy for constipation, either habitual or caused from pregnancy. I shall continue to use it, being very much pleased with its action.

Buffalo Lithia Springs.

The therapeutic value of lithia and salts containing that remarkable alkali becomes better known and appreciated every day. Its singular potency in many of the more serious diseases of the kidney and bladder has given it a high position in the *materia medica*. Further than that, recent researches tend to show that in the numerous complaints which have been charged to rheumatism, gout, old age and the like, but which are really caused by the presence of chemical compounds in the blood and tissues that have not been removed by the kidneys, lithia gives to the physician a new method of attacking an old evil, and to the patient a new avenue of escape from suffering and possible death. When lithia was found to possess remarkable curative powers, it was at first feared that the supply was too small to meet the demand from the faculty the world over. With the growth in popularity, there came a corresponding development in its supply and sources. Thus, in the United States, there are no less than thirty lithia springs of more or less value and excellence. Of these, notable instances are the famous Buffalo Lithia Springs. Their medicinal virtues were known even before the fact of their containing lithia had been discovered, and enjoyed a wide local popularity and repute. Chemical analysis showed the popularity to be founded on a substantial basis. It went further, and demonstrated these waters to be one of the most efficient and beneficent natural medicines in the world. From that time on the history of the spring has been a long and ever increasing series of cures. Its water is as rich, powerful and sparkling as when it first attracted public attention. Its analysis to-day varies scarcely a ten-thousandth from that of six years ago. This is in marked contrast with those springs which, with increased demand upon their output, change in character and gradually lose the elements by which they were originally distinguished. The Buffalo Lithia Springs, so far as can be foreseen, will be just as potent for good to sick and suffering humanity a hundred years hence as it is at the present time. With these many and great advantages, it is no wonder the springs have gained a cosmopolitan reputation.—*American Analyst*, N. Y.



THE DENTIST'S SOFT TEMPERED STUB STEEL ROUND
NERVE BROACHES.

OLOF JOHANSON,
 PATENTEE AND SOLE MANUFACTURER,
No. 1 MAIDEN LANE, NEW YORK.

OLOF JOHANSON,
DENTISTS' NERVE BROACH,

Patent No. 251,598. Patented Dec. 27, 1881.

Postage paid to any part of the United States and Canada.

Since patenting these Broaches, I have improved them by making them cylindrical instead of conical, permitting of a more distinct barb at the point, also the permanent attachment to each Broach of a brass stem of convenient size and length for handling. Dentists who have examined these improved broaches, and are using them, say they are perfection and far superior to any broach made, being so finely tempered, they never break in the nerve canal as is so often the case with those usually made.

By recent improvements the Broaches are made in four sizes. For Sale by all Wholesale Dealers only.

Note following from some of the most prominent Dentists in the United States.

The undersigned Dentists, state that they are familiar with all the various kinds of Dental Broaches manufactured; that they are acquainted with and have used the Broach invented, patented, and manufactured by OLOF JOHANSON of New York City; and that they consider said Broach superior to any known to them, and use it in preference to all others.

Norman N. Kingsley, No. 25 West 27th Street, New York, in practice 29 years.		
E. S. Woodward, No. 361 Fifth Avenue,	"	20 "
George F. Schaffer, No. 44 West 34th Street,	"	17 "
John B. Rieh, M; D., No. 12 East 22d Street,	"	43 "
William A. Dwinelle, M. D., No. 27 West 34th St.,	"	41 "
A. S. Northrope, No. 44 West 4th Street,	"	20 "
N. Malon Beckeirth, No. 125 West 42d Street,	"	42 "
E. Todd, No. 47 East 29th Street,	"	12 "
W. D. Tenison, No. 45 East 28th Street,	"	19 "
M. M. Maltby, D. D. S., No. 32 East 24th Street,	"	14 "
W. A. Bronson, M. D., No. 8 East 34th Street,	"	30 "
C. E. Franeis, D. D. S., No. 33 West 44th Street,	"	21 "

Spiral Handle.—I can furnish these Broaches with my new Spiral Handle, thus giving a flexible and pliable Handle that can be bent to any shape and be of great use to the operator.

Send all orders to **OLOF JOHANSON,**
No. 1 Maiden Lane, NEW YORK CITY.

FELLOWS' HYPO-PHOS-PHITES

(SYR : HYPOPHOS : COMP : FELLOWS)

Contains *The Essential Elements* to the Animal Organization — Potash and Lime ;

The *Oxydizing Agents* — Iron and Manganese ;

The *Tonics* — Quinine and Strychnine ;

And the *Vitalizing Constituent* — Phosphorus,

Combined in the form of a syrup, with *slight alkaline reaction*.

It Differs in Effect from all Others, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

It has Sustained a High Reputation in America and England for efficiency in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs, and is employed also in various nervous and debilitating diseases with success.

Its Curative Properties are largely attributable to Stimulant, Tonic and Nutritive qualities, whereby the various organic functions are recruited.

In Cases where enervating constitutional treatment is applied, and tonic treatment is desirable, this preparation will be found to act with safety and satisfaction.

Its Action is Prompt: stimulating the appetite and the digestion, it promotes assimilation, and enters directly into the circulation with the food products.

The Prescribed Dose produces a feeling of buoyancy, removing depression or melancholy, and hence is of great value in the treatment of MENTAL AND NERVOUS AFFECTIONS.

From its exerting a double tonic effect and influencing a healthy flow of the secretions, its use is indicated in a wide range of diseases.

Each Bottle of Fellows' Hypophosphites contains 128 Doses.

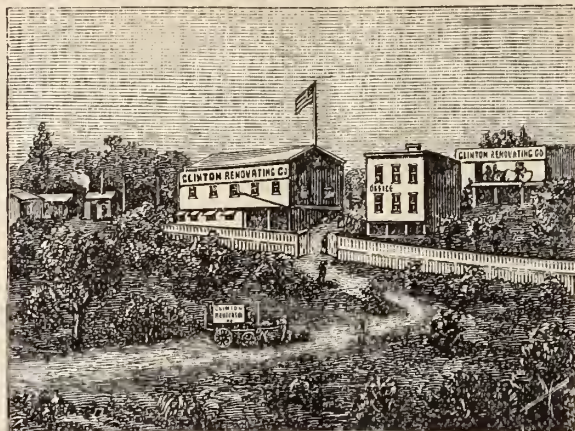
Prepared by JAMES I. FELLOWS, Chemist,
48 Vesey Street, New York.

Circulars and Samples sent to Physicians on application.

FOR SALE BY ALL DRUGGISTS.

CLINTON RENOVATING COMPANY.

OFFICE:
359
 CLINTON ST.
 Cor. Degraw,
 BROOKLYN,
 N. Y.



THE
NAPHTHA
BATH
 USED ONLY BY
 THIS
 COMPANY.

This Company calls the attention of the medical profession and the public to their system of Renovating and Disinfecting by the use of the

NAPHTHA BATH.

This process can be applied to all article of Furniture, Beds, Bedding and Mattresses, without either ripping or taking them apart. Every one who has tried this system pronounces it perfect, and the Company would like you to practically convince yourself of its merits.

Goods called for and delivered in Brooklyn, free of charge.

This Company refers to: Sheppard Knapp & Co., 13th Street and Sixth Avenue, New York.

J. R. Hegeman, Vice-Pres. Metropolitan Life Ins. Co., New York.

H. W. Maxwell, 70 First Place, Brooklyn.

Dr O. C. Gage, 26 West 31st Street, New York; and many others.

DOCTORS, LOOK HERE!!

FIRE AND BURGLAR PROOF
SAFES
 AT WHOLESALE.

WANTED!

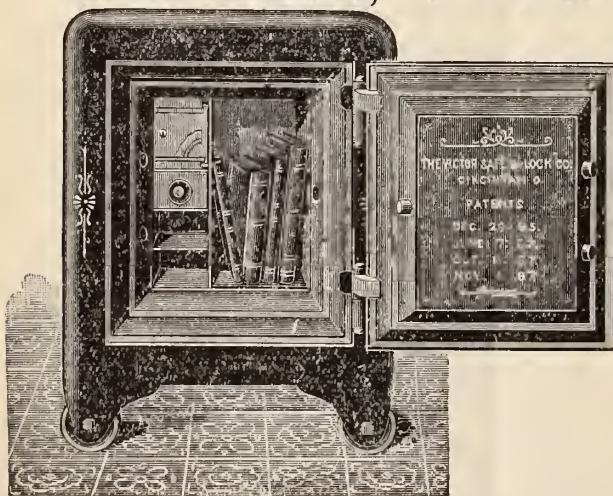
WANTED!

WANTED!

The names and addresses of all Lawyers, Doctors, Merchants, small dealers, Farmers, Housekeepers, and men of every calling

WHO HAVE NO SAFES.

We will furnish you with a first-class Safe, strictly fire-proof, burglar-proof combination lock, beautifully finished and lettered with name, at \$12 and upwards.



DEATH TO HIGH PRICES.

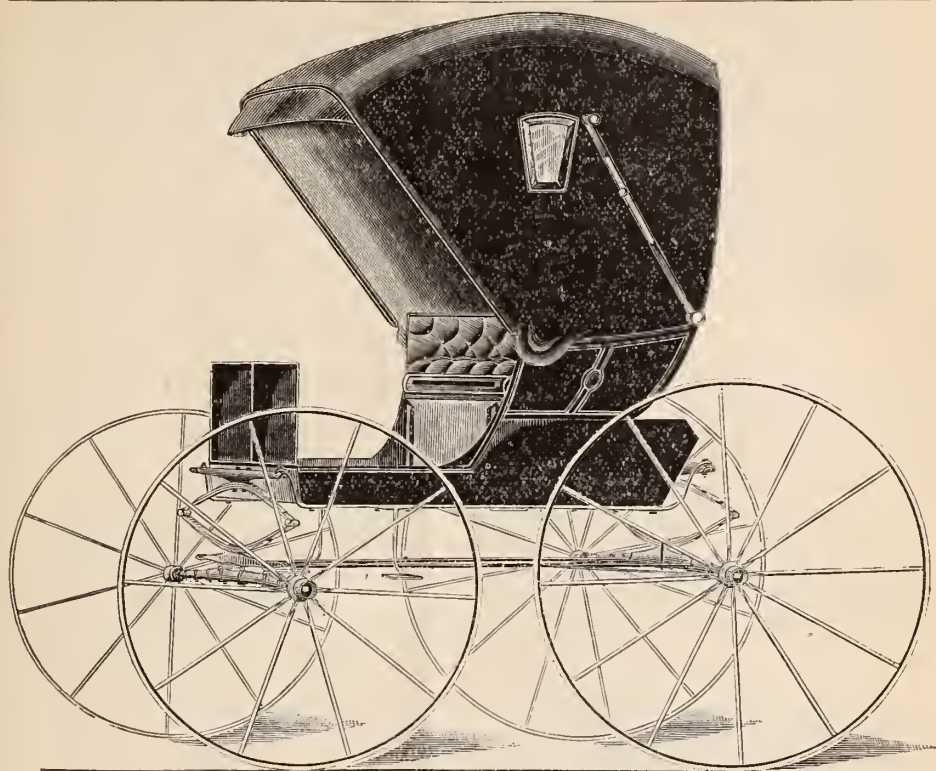
We pay no salaries or commissions to middlemen nor agents. We have no high salaried officers, but practice strictest economy to enable us to sell direct to the user at **LOWEST WHOLESALE PRICES.** The **Victor Safes and Locks** are the latest improved and are manufactured under excellent patents, issued Dec. 29th, 1885; June 7th, 1887; Oct 11th, 1887; and Nov. 1st, 1887.

Every Safe is guaranteed Satisfactory. Our prices are about 80 per cent. lower than any others. Write for our prices and terms at once. *Don't fail to mention the Digest.*

THE VICTOR SAFE & LOCK CO.,

118 West 7th Street,

CINCINNATI, OHIO.



VALENTINE LINN,
MANUFACTURER OF
FINE CARRIAGES,

47, 49, 51 & 53 BERGEN STREET, BROOKLYN, N. Y.

Telephone call 760.

*Broughams, Octagons, Coupes, Four and Six Seat Rockaways,
Victorias, Cabriolets, Extension and Canopy Top
Phaetons, and Surreys, Etc.*

PHYSICIANS' PHAETONS A SPECIALTY.

Below will be found the names of a few of the many physicians who have them now in use and will recommend them for their superior qualities. I make five different styles of them. Catalogues and Price Lists will be furnished on application.

Dr. Henry Armgardt, 317 Leonard St., Brooklyn, N. Y.

" E. S. Bunker, 117 St. Johns Place, " "
" John Byrne, 301 Clinton St., " "
" Wm. M. Butler, 507 Clinton Ave., " "
" C. M. Bellows, 442 Noystrand Ave., " "
" N. M. Carter, 499 Washington Ave., " "
" E. Etinge, 2 Verona Place, " "
" George Fowler, 615 Marcy Ave., " "
" William Gillilan, Remsen & Henry St., " "
" E. Hilton, 201 South 8th St., " "
" H. J. Hesse, late Coroner, 163 Bushwick Ave., " "
" Brooklyn, N. Y.

" M. A. D. Jones, 163 Dekalb Ave., " "
" Chas. N. D. Jones, 163 Dekalb Ave., " "
" Chas. Jewett, 307 Gates Ave., " "
" Geo. C. Jeffery, 304 Jefferson Ave., " "
" J. C. Lester, 406 Clinton St., " "
" Nathan Matson, 415 Green Ave., " "

Dr. William Matson, 415 Green Ave., Brooklyn, N. Y.

" John A. McCorkle, 149 Clinton St., " "
" John Merritt, 22 Lafayette Ave., " "
" Wm. C. Murray, 436 Lewis Ave., " "
" C. H. Muncie, 363 Tompkins Ave., " "
" N. J. Preston, 98 Lafayette Ave., " "
" Frank W. Rockwell, 6 Lafayette Ave., " "
" H. B. Smith, 131 Fort Green Place, " "
" A. Sanford, 345 Tompkins Ave., " "
" James Sweeney, 192 North 6th St., " "
" C. B. Schlatter, 158 Seventeenth St., " "
" Chas. T. Schmidt, 73 Stagg St., " "
" James J. Terhune, 171 Adelphi St., " "
" William Watersworth, 493 Franklin Ave., " "
" Walter L. Ranney, 14 West 32nd St., N. Y. " "
" F. W. Knapp, Orange, N. J. " "
" W. W. Heberton, Orange, N. J. " "

"The Ideal Lustre"

Is a Peculiar Brilliancy of the Teeth,
combined with a

Ruddy Healthfulness of the Gums,

by which you can at once detect the user of the



"IDEAL" IN { NAME. NATURE. RESULTS,
as slight familiarity will prove.

Recommended by Prominent Dentists everywhere, among them Dr. T. B. Arnold, 127 W. 34th St., N. Y., writes: "It has no equal for Polishing the Teeth and Hardening the Gums."

Dr. C. H. Bartlett, a noted dentist of St. Louis, calls it: "The Best thing ever offered to the public as a cleansing agent for the teeth."

Adopted in Hospitals for its cleanliness and freedom from infections results; as a fresh polisher can be used every time at slight expense.

Its Economy. Holder (imperishable) 35 cents. Polishers only need be renewed. 18 (boxed) 25 cents. Dealers or mailed.

HORSEY MFG CO., Utica, N. Y.

TO ADVERTISERS!

For a check for \$20 we will print a ten-line advertisement in One Million issues of leading American Newspapers and complete the work within ten days. This is at the rate of only one-fifth of a cent a line, for 1,000 Circulation! The advertisement will appear in but a single issue of any paper, and consequently will be placed before One Million different newspaper purchasers; or FIVE MILLION READERS, if it is true, as is sometimes stated, that every newspaper is looked at by five persons on an average. Ten lines will accommodate about 75 words. Address with copy of Adv. and check, or send 30 cents for Book of 256 pages.

GEO. P. ROWELL & CO., 10 SPRUCE ST., NEW YORK.

We have just issued a new edition of our Book called "Newspaper Advertising." It has 256 pages, and among its contents may be named the following Lists and Catalogues of Newspapers:—

DAILY NEWSPAPERS IN NEW YORK CITY, with their Advertising Rates.

DAILY NEWSPAPERS IN CITIES HAVING more than 150,000 population, omitting all but the best.

DAILY NEWSPAPERS IN CITIES HAVING more than 20,000 population, omitting all but the best.

A SMALL LIST OF NEWSPAPERS IN which to advertise every section of the country: being a choice selection made up with great care, guided by long experience.

ONE NEWSPAPER IN A STATE. The best one for an advertiser to use if he will use but one.

BARGAINS IN ADVERTISING IN DAILY Newspapers in many principal cities and towns, a List which offers peculiar inducements to some advertisers.

LARGEST CIRCULATIONS. A complete list of all American papers issuing regularly more than 25,000 copies.

THE BEST LIST OF LOCAL NEWSPAPERS, covering every town of over 5,000 population and every important county seat.

SELECT LIST OF LOCAL NEWSPAPERS, in which advertisements are inserted at half price.

5472 VILLAGE NEWS PAPERS, in which advertisements are inserted for \$12.15 a line and appear in the whole lot—one half of all the American Weeklies.

Book sent to any address for **THIRTY CENTS.**



VACCINE VIRUS.

Pure and Reliable Animal Vaccine
Lymph, Fresh Daily.

LIBERAL TERMS. SEND FOR CIRCULAR.

10 Ivory Points.....double charged, \$1.00
10 Quill Slips (half quills).....double charged, 1.00
Orders by Mail or Telegraph promptly dispatched.

NEW ENGLAND VACCINE CO.,
Chelsea Station, Boston, Mass.

WM. C. CUTLER, M. D.

J. F. FRISBIE, M. D.

CHAS. R. AVERY,

PHARMACIST,

447 COURT ST., Cor. 4th PLACE,

BROOKLYN, N. Y.

Prescriptions carefully compounded.

PARKE, DAVIS & CO.'S AND SQUIBB'S

PREPARATIONS IN STOCK.

Telephone Call, 1023.

CHARLES DENNIN,

Druggist & Apothecary

FIRST PLACE,

Cor. Court St. BROOKLYN, N. Y.

TELEPHONE CONNECTION.

SQUIBB'S PREPARATIONS DISPENSED.

ALETTRIS CORDIAL

UTERINE TONIC AND RESTORATIVE.

Prepared from the Aletris Farinosa or True Unicorn and Aromatics.

INDICATIONS.

Amenorrhea, Dysmenorrhea, Leucorrhea, Prolapsus Uteri, Sterility, to Prevent Miscarriage, Etc.

DOSE:—ONE TEASPOONFUL THREE OR FOUR TIMES A DAY.

UNRIVALED AS A UTERINE TONIC IN IRREGULAR, PAINFUL, SUPPRESSED AND EXCESSIVE MENSTRUATION.

It Restores Normal Action to the Uterus, and Imparts Vigor to the Entire Uterine System.

Where women have miscarried during previous pregnancies, or in any case where miscarriage is feared, the **ALETTRIS CORDIAL** is indicated, and should be continuously administered during entire gestation.

CHAS. CLAY, M. R. C. S., Manor House, Dewsbury, England, says:—I find Aletris Cordial (Rio) is of great service in threatened miscarriage.

FRANCIS E. CANE, L. R. C. S., &c., Leeds, England, says:—I have tried the Aletris Cordial (Rio) in two cases of long standing dysmenorrhea, with excellent results. One of these patients has spent a week in bed every month for two years. After all the usual remedies, I put her on Aletris Cordial, and for the last two periods she has been out and about all the time.

L. M. WATSON, M. D., Delhi, Ills., says:—I have used Aletris Cordial (Rio) in cases of dysmenorrhea, suppressed menses and threatened miscarriage, and also, combined with Celerina, as a tonic after confinement, with the happiest results, and now I am using it on a case of leucorrhea, with injections of S. H. Kennedy's Extract of Pinus Canadensis, and it is acting like a charm.

P. H. OWEN, M. D., Morganville, Ala., says:—I have prescribed Aletris Cordial (Rio) in several cases with the most satisfactory results, and regard it as the best uterine tonic I have met with in a professional experience of over twenty-five years. In cases of threatened miscarriage it acts like a charm. Would recommend its continuous administration in all cases when there is any indication of miscarriage.

Dr. W. BERTHELOT, Santander, Spain, says:—I have tried the Aletris Cordial (Rio), and it has seemed to me to be useful, especially in cases of dysmenorrhea.

Dr. RASQUINET, Jupile, near Liege, Belgium, says:—I tried Aletris Cordial (Rio) in the case of a woman who had had several miscarriages at the end of five months, and who is now again pregnant, having reached the seventh month: thanks to Aletris Cordial.

R. REECE, M. R. C. S., Walton-on-Thames, England, says:—Aletris Cordial (Rio) in cases of painful menstruation is most valuable. A wife of a minister suffered much, and had had three miscarriages. I prescribed Aletris Cordial. She has for the first time, gone her full time, and was safely confined with a male child.

J. T. COLLIER, M. D., Brooks, Me., says:—I have used your Aletris Cordial (Rio) in cases of females at the menopause. Consider it one of the finest remedies for these cases.

Dr. GORDILLON, St. Amand, France, says: I have tried the Aletris Cordial (Rio) in a case of dysmenorrhea. The result I obtained from the use of your preparation was excellent, better than I had obtained in the same patient by prescribing the usual remedies employed in such cases.

W. F. TOOMBS, M. D., Morrilton, Ark., says:—I have used a great deal of your Aletris Cordial (Rio) and I find it all you claim for it in amenorrhea, dysmenorrhea, metritis, leucorrhea; I don't think it has an equal. I have used it in two cases of threatened miscarriage and the trouble was obviated. For a general Uterine Tonic I know of nothing superior.

R. D. PATTERSON, L. R. C. S. &c., Medical Officer, Caledon Dispensary, Co. Tyrone, Ireland, says:—I have very great pleasure in testifying to the very high opinion I hold of Aletris Cordial (Rio) in threatened miscarriage.

RIO CHEMICAL CO., ST. LOUIS, MO., U. S. A.

LONDON,
16 Coleman St.

CALCUTTA,
9 & 10 Dalhousie Square.

PARIS,
5 Rue de la Paix.

MONTREAL,
374 St. Paul St.

MEDICO-CHIRURGICAL COLLEGE, OF PHILADELPHIA.

SESSIONS OF 1888-1889.

FACULTY.

JAMES E. GARRETSON, A.M., M.D.,
Professor of Oral Surgery and of Clinical Surgery.
WILLIAM H. PANCOAST, A.M., M.D.,
Professor of General, Descriptive and Surgical Anatomy, and of Clinical Surgery.
GEORGE E. STUBBS, A.M., M.D.,
Professor of Surgical Pathology and Clinical Surgery.
WILLIAM F. WAUGH, A.M., M.D.,
Professor of Principles and Practice of Medicine and of Clinical Medicine.
ABRAHAM S. GERHARD, A.M., M.D.,
Professor of General Pathology and of Medical Jurisprudence.
WILLIAM S. STEWART, A.M., M.D.,
Professor of Obstetrics and of Clinical Gynecology.
H. EARNEST GOODMAN, M.D.,
Professor of Principles and Practice of Surgery, Orthopaedics and of Clinical Surgery.

PETER D. KEYSER, A.M., M.D., DEAN,
Professor of Ophthalmology.
THOMAS C. STELLWAGEN, M.A., M.D.,
Professor of Physiology.
FRANK WOODBURY, A.M., M.D.,
Professor of Materia Medica and Therapeutics, and of Clinical Medicine.
SAMUEL B. HOWELL, A.M., M.D.,
Professor of Chemistry.
JOHN V. SHOEMAKER, A.M., M.D.,
Professor of Skin and Venereal Diseases.
EDWARD E. MONTGOMERY, B.S., M.D.,
Professor of Didactic and Clinical Gynecology.
WILLIAM B. ATKINSON, M.A., M.D.,
Professor of Sanitary Science and of Pediatrics.

OTHER INSTRUCTORS.

ISAAC BARTON, M.D.,
Lecturer on Laryngology and Chief Asst. in Throat Clinic.
M. H. CRYER, M.D., *Lecturer on Oral Surgery.*
FRANK FISHER, M.A., M.D.,
Lecturer on Ophthalmoscopy, and Chief Assistant in Eye Clinic.
BENJAMIN T. SHIMWELL, M.D.,
Lecturer on Minor Surgery, and Chief-Assistant in Prof. Goodman's and Garretson's Surgical Clinic.
W. G. MCCONNELL, M.D., *Lecturer on Venereal Diseases.*
SPENCER MORRIS, M.D., *Lecturer on Symptomatology*
CONRAD BERENS, A.B., M.D.,
Lecturer on Otolgoy, and Chief-Assistant in Ear Clinic
W. XAVIER SUDDUTH, M.D., F.R.M.S.,
Lecturer on Diseases of the Genito-Urinary System, and Demonstrator of Pathological Histology.
HENRY C. BOENNING, M.D., *Demonstrator of Anatomy.*
E. S. GANS, M.D., *Instructor in Dermatology.*
E. L. B. GODFREY, M.D., *Lecturer on Fractures.*
A. E. ROUSSEL, M.D., *Adjunct to the Chair of Practice*
L. HARRISON METTLER, M.D.,
Lecturer on Electro-Therapeutics.
G. W. MCCASKY, M.D.,
Lecturer on Mental and Nervous Diseases.
WILLIAM M. WELSH, M.D.,
Lecturer on the Erythematia.
CHARLES M. SELTZER, M.D.,
Lecturer on Therapeutic Diets.
MAX J. STERN, M.D., *Instructor in Laryngology.*

E. L. VANSANT, M.D.,
Chief-Assistant in Medical Dispensary; Demonstrator of Normal Histology.
JOHN AULDE, M.D.,
Demonstrator of Physical Diagnosis.
J. W. WEST, M.D., *Demonstrator of Gynecology.*
L. GREENBAUM, M.D., D.D.S.,
Demonstrator of Chemistry.
HENRY FISHER, Ph. G., M.D.,
Demonstrator of Pharmacy.
E. GREWER, M.D., *Demonstrator of Practical Physiology.*
T. RIDGWAY BARKER, M.D.,
Assistant in Clinical Surgery.
M. F. LORMAN, M.D.,
Chief-Assistant to the Surgical Clinic.
ROBERT WHARTON, M.D.,
Assistant in Surgical Clinic.
VICTOR G. R. RHEIN, M.D.,
Assistant in Pediatrics.
LOUIS VON COTZHAUSEN, M.D., Ph.G.,
Assistant in Medical Clinic.
J. J. TAYLOR, M.D., *Assistant in Medical Clinic.*
W. J. HOLLY, M.D., *Assistant in Surgical Clinic.*
C. FITZPATRICK, JR., M.D.,
Assistant in Surgical Clinic.
W. A. N. DORLAND, M.D., *Assistant in Gynecology.*
A. L. SAVAGE, M.D., *Assistant in Clinical Surgery.*
P. S. DONNELLAN, L.K.Q.C.P., L.R.C.S.I., L.M.,
Assistant in Medical Dispensary.
C. L. FISHER, M.D.,
Assistant in Prof. Pancost's Surgical Clinic.

Every candidate for admission who does not present a degree in Arts or Sciences, a certificate of graduation in a high or normal school, or a certificate of having passed a satisfactory examination of a duly organized County Medical Society, must undergo an examination in English, Latin, Physics and Mathematics. The examination may be conducted by one of the Censors or at the College. Instruction is given by lectures, clinical teaching and practical demonstrations. In the subjects of Anatomy, Pharmacy, Chemistry, Histology and Pathological Anatomy, the usual methods of instruction are largely supplemented by laboratory work. The year begins Sept. 10th, and is divided into a preliminary session of three weeks, a Regular session of six months and a Spring session of ten weeks. Students are divided into three classes according to their time of study and proficiency. Students who have begun their professional studies elsewhere may be admitted to advanced standing upon satisfactory examination in the branches already pursued by the class to which they seek admission. Although the degree of DOCTOR OF MEDICINE is conferred at the end of three years' study, a fourth year is provided which is voluntary (but) attendance upon which will afford the student increased facilities for practical study in clinical medicine, surgery and the various specialties.

ORDER OF STUDIES:

FIRST YEAR:—Anatomy (bones and ligaments), Physiology, General Chemistry, Materia Medica and Pharmacy, General Pathology and Hygiene. SECOND YEAR:—Anatomy (muscles, vessels and viscera), Medical Chemistry, Physiology, Physical Diagnosis, Therapeutics, Clinical Medicine, and Clinical Surgery. THIRD YEAR:—Anatomy (Nervous System), Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgical Pathology, Surgery, Clinical Surgery, Ophthalmology, Dermatology, Syphilis, Diseases of Women, Diseases of Children, Electro-Therapeutics and Forensic Medicine. FOURTH YEAR:—Ophthalmology, Otolgoy, Dermatology, Syphilis, Laryngology, Mental and Nervous Diseases, Diseases of Women, Diseases of Children, Clinical Medicine, Clinical and Operative Surgery, Orthopaedic Surgery, Oral Surgery, Forensic Medicine, Genito-urinary Diseases, Diseases of the Rectum, Diseases of the Female Bladder, Bacteriology, Clinical Microscopy, Preparation of Food for Infants and Invalids and Anesthetics.

REQUIREMENTS FOR A DEGREE:—Every candidate must be twenty-one years of age, must have attended three or four full terms, one Winter session of which was spent at this school, have passed a written examination upon the prescribed studies of the course.

FEES:—Matriculation, \$5; for the first and second years, each, \$75; for the third year (graduation included), \$100; for the fourth year, to graduates of this school free; to graduates of other schools upon the payment of a matriculation fee, only graduates of a three years school will be permitted to join the graduating class for the degree of this school upon the payment of a fee of \$10. The above fees are conditional upon their being paid before Nov. 1st.

For further information, or Catalogue, address

Dr. E. E. MONTGOMERY, Sec'y, 1818 Arch St., or
Medico-Chirurgical College, Philadelphia, Pa.

THE STROUT Heating and Ventilating System,

FOR DWELLING HOUSES, CHURCHES AND
PUBLIC HALLS.

H. C. STROUT & CO.

(Successors to Strout & Williams),

MANUFACTURERS OF

Strout's Patent Heating and Ventilating Attachments.

OFFICE:

No. 564 STATE ST., Cor. Flatbush Ave., BROOKLYN, N. Y.

The object of the Strout System is to equalize the temperature of buildings and prevent direct drafts and an unequal distribution of hot air, regulating its circulation so that all portions, upper and lower, shall be of uniform temperature and purity.

The system is exclusively adapted to dwelling houses, churches and all public halls and buildings that are heated from either the enclosed or portable furnace. It can readily be applied to any furnace in present use. The practical introduction of the same has invariably shown:

1. Its health-giving qualities in preserving at all times a pure circulation of heated air.

2. It makes the furnace distribute its maximum of heat, with a saving in coal of not less than 25 per cent., and in churches and public halls the gain is even greater.

For further particulars and circulars, address manufacturers as above.

CLASSIC—

Unique—



Grotesque—

Romantic



~~~~~for~~~~~  
Publishers~~~~~

~~~~~Merchants~~~~~

~~~~~Societies~~~~~

~~~~~Advertisers~~~~~

P. F. McBREEN
PRINTER

Steam Power
Improved Presses
New Type

61 BEEKMAN STREET
NEW YORK

Estimates Furnished

Established 1872

DIOVIBURNIA

A POWERFUL UTERINE TONIC AND ANTISPASMODIC.

The most **PERFECT** compound **EVER OFFERED** to the **MEDICAL PROFESSION** for the relief of the following female disorders: **DYSMENORRHOEA, AMENORRHOEA, MENORRHAGIA, LEUCORRHOEA, SUBINVOLUTION, PUERPERAL CONVULSIONS, RELAXED** condition of **UTERUS** and **APPENDAGES** and **THREATENED ABORTION**; directing its action in a most remarkable manner to the entire **UTERINE** system as a general tonic and **ANTISPASMODIC**, and in cases of impaired vitality. *Complete Restoration follows its use.*

This happy combination is the result of an **EXTENSIVE PROFESSIONAL EXPERIENCE RUNNING THROUGH A SERIES OF YEARS**, in which the constituent parts have been **FULLY TESTED**, singly and in combination, in various proportions, until **PERFECTION** has been **ATTAINED**. We, with the profession, have no regard for secret remedies.

DIOVIBURNIA

is prepared for prescribing exclusively, and the Formula as given, will commend itself to every intelligent physician

FORMULA.

VIBURNUM PRUNIFOLIUM, VIBURNUM OPULUS, DIOSCOREA VILLOSA, ALETRIS FARI-
NOSA, HELONIAS DIOICA, MITCHELLA REPENS, CAULOPHYLLUM
THALICTROIDES, SCUTELLARIA LATERIFLORA.

Every ounce contains ¼ dram each, of the fluid extract. For further information see bottom of this page.

PALPEBRINE

A TRUSTWORTHY REMEDY IN EXTERNAL EYE DISEASES.

THE forms of disease for which this compound is highly recommended are the following:
Simple Conjunctivitis, Acute and Chronic Catarrhal Conjunctivitis, Vernal Conjunctivitis, Acute and Chronic Blepharitis, Strumous or Scrofulous Conjunctivitis, Marginal Blepharitis and Inflammation of the Lachrymal Sac.

PALPEBRINE is not a *secret* remedy, and in offering it to the general practitioner we give the formula in full. It contains no unknown and untried agents, but is composed of the following well-known drugs which will commend it to the profession at once.

FORMULA AND MEDICAL PROPERTIES:

| | |
|---|--------------------|
| ACIDUM BORACICUM, [an antiseptic] | One per cent. |
| HYDRARGYRUM BICHLORIDUM, [an antiseptic and irritant] | One part in 5,000. |
| TINCTURE OF OPIUM, [nerve tonic, slightly narcotic] | A trace. |
| ZINCUM SULPHURICUM, [an irritant astringent] | One part in 1,000. |
| GLYCERINUM PURUM, [an irritant] | One part in 10. |

EYE diseases are the best and most fruitful field for quackery, and the amount of harm being done by *quacks* and *patent medicines* in eye diseases is fearful to behold. In offering **PALPEBRINE** to the profession we wish to give to the busy practitioner a reliable and safe remedy, easily prescribed, of known qualities and quantities. We are certain after a trial our efforts will be appreciated.

TO any physician, unacquainted with the medicinal effects of **DIOVIBURNIA** and **PALPEBRINE**, we will mail pamphlet containing full information, suggestions, commendations of some of the most prominent practitioners in the profession, and various methods of treatment; also a variety of valuable prescriptions that have been thoroughly tested in an active practice, or to physicians desiring to try our preparations, and who will pay express charges, we will send on application a full size bottle of each free.

DIOS CHEMICAL COMPANY, ST. LOUIS, MO., U. S. A.

THE
AMERICAN MEDICAL DIGEST
A MONTHLY EPITOME
OF
MEDICAL LITERATURE AND SCIENCE.

This old established Magazine is claimed by the Medical Profession to be the most useful, as it is conceded to be the most popular Medical Journal published in America, presenting as it does each month in attractive and readable form, a skillfully condensed Digest of the best current Medical Literature of this Country and Europe, prepared directly for its pages by a corps of well known specialists, under able editorial supervision.

The issues of each year constitute a complete volume, in which is embodied a comprehensive record of the World's Medical and Surgical achievements during that period, concisely stated, carefully classified and extensively illustrated.

It is distinctively

A JOURNAL OF MEDICAL PROGRESS,

replete with information and practical suggestions that are invaluable to the busy practitioner, who would be compelled to search through the technical literature of the whole world to find the same facts outside of its pages.

The Physician by its aid is enabled to save time, labor and expense, in keeping himself thoroughly informed in all that is occurring in his profession which it would be useful for him to know, and its regular monthly appearance precludes all possibility of his falling behind his colleagues in familiarity with the progress of the period.

Its practical value is attested to by nearly Seven Years of successful existence, and the unflinching testimony of its extensive list of subscribers is that

NO DOCTOR CAN AFFORD TO BE WITHOUT IT

who is ambitious of occupying a creditable position in or near the front rank of his profession.

Determined to extend its field of usefulness to the furthest attainable limits, the management of THE AMERICAN MEDICAL DIGEST has at considerable expense brought new influences to bear upon its interests, which, without altering, will, it is believed, considerably expand its scope. All that it has been in the past it will continue to be, while new features will be added from time to time which will increase its utility and value.

Meanwhile the Subscription Price remains

\$2 PER YEAR.

payable in advance to the Publishers

The Analyst Publishing Company,
19 PARK PLACE,
NEW YORK.

A Peerless Chemico-Physiological Food and Restorative

**Crystalline
Phosphate**

**A
TISSUE FOOD**



Contains all essential inorganic components of the tissues in a semi-solid, easily soluble, crystalline mass,

COMPOSED OF

ACID PHOSPHATE OF CALCIUM.

WITH

Acid Phosphate of Magnesium,

" " " Iron,

" " " Sodium,

" " " Potassium,

Chloride of Potassium,

" " Sodium

Sulphate of Potassium,

and Phosphoric acid.

INDICATIONS:

STOMACH DISORDERS, such as Indigestion, Flatulence Gastric Catarrh, and Poor Appetite, Constipation, etc.

WRONGS OF NUTRITION, as in Scrofula, Rickets, Caries, Marasmus, Delayed Union of Fractures, Necrosis of Tissue, Difficult or Delayed Dentition and Development, etc.

NERVOUS AND GENERAL DEBILITY AND SLEEPLESSNESS, as from Sexual Excess, Venereal Disease, Childbearing, Nursing, Loss of Blood or other fluids, Menstrual and other Diseases of Women, abuse of Alcohol, Tobacco and Narcotics, Protracted Illness, etc.

WASTING DISEASE.—"As a reconstructive or tissue food in convalescence from fevers and all wasting diseases **CRYSTALLINE PHOSPHATE** is an admirable remedy."

E. YUNKIN, M. D., Prof. Surgery Am. Med. Col., St. Louis, Mo.

TONIC DYSPEPSIA.—"I have used **CRYSTALLINE PHOSPHATE** in several cases of Atonic Dyspepsia with the best results.

JOSEPH EICHBERG, M. D., 377 West 7th Street, Cincinnati, Ohio.

Write for Samples and Treatise—Mailed Free. Mention this Journal.

ROVIDENT CHEMICAL WORKS, - - ST. LOUIS, MO., U. S. A.

E. C. RICH CO., Limited, New York City, Eastern Agents,

BOUND VOLUMES FOR 1888.

Subscribers sending us the twelve numbers for 1888 with \$1, can have them returned handsomely bound. Any missing number will be supplied for twenty cents additional.

THE ANALYST PUBLISHING CO.,

19 Park Place,

New York.

THE DIGESTIVE FERMENTS

AS

Solvents of Diphtheritic Membrane.

TRYPSIN.

This ferment of the pancreas is worthy of use upon ground of theory and of experience. It is a powerful solvent of fibrin in water without the interaction of alkali or acid. It exhibits its greatest activity in slightly alkaline media.

Trypsin has been applied with success in the solution of diphtheritic membrane.

Many physicians have voluntarily communicated to us reports of successful cases in their practice.

From our knowledge of the actual digestive properties of trypsin, and upon information that it is capable of effective application, we respectfully commend it to the attention of the medical profession.

We make no claim about the cure of diphtheria with trypsin, or of the extent of its influence in the treatment of this disease.

We submit trypsin upon the basis of its properties as the most capable of all digestive principles, animal or vegetable, in a pure aqueous or in alkaline media.

If the conditions admit of its being brought into contact with the membrane, in persistently repeated application, either in powder or mixture with brush or spray, its real value can be put to test with great possibilities for good.

If the necessary portion of the mixture is warmed to 115° F. it will act more quickly than when cold. But it must be heated cautiously, to avoid killing the digestive principle. It does not require to be in solution simply in admixture.

PEPSIN.

Pepsin is inert upon fibrin without the interaction of acid.

The gastric ferment should be used with water acidulated to about a half or one per cent, with hydrochloric acid U. S. P. although it also acts with lactic, citric, tartaric, and phosphoric acid, etc.

Pepsin does not require to be in solution; simply in admixture with the water and acid.

In diphtheria, pepsin is necessarily restricted to cases where the application of acid is permissible.

The albumen digesting principle of plants is in acid media greatly inferior to pepsin, in alkaline or neutral media greatly inferior to trypsin.

The Fairchild Digestive Ferments are most active, permanent, and reliable.

MADE BY

FAIRCHILD BROS. & FOSTER,
NEW YORK. LONDON.

THE
BACK

MEDICAL LIBRARY

OF

AMERICAN

MEDICAL

DIGEST

ISSUED IN
MONTHLY PARTS

VOL. VIII.

APRIL 15, 1889.

PART 4.

TWO DOLLARS A YEAR.

INDEX ON PAGE 2.

EDITED BY

JOHN C. LESTER, A.M., M.D.

COLLABORATORS.

ALEXANDER J. C. SKENE, M.D.,

Professor of the Medical and Surgical Diseases of
Women, Long Island College Hospital.

ARTHUR MATHEWSON, M.D.,

Professor of Ophthalmology, Long Island College
Hospital.

LANDON CARTER GRAY, M.D.,

Professor of Nervous and Mental Diseases, N. Y.
Polyclinic.

BENJ. F. WESTBROOK, M.D.,

Chief of Dept. Diseases of Chest, at St. Mary's and
Seney Hospitals.

A. H. BUCKMASTER, M.D.,

Gynecologist to St. Peter's Hospital.

F. R. STURGIS, M. D.,

Professor Venereal Diseases, College of Physicians
and Surgeons, N. Y.

GEORGE HENRY FOX, M.D.,

Professor of Diseases of the Skin, College of
Physicians and Surgeons, N. Y.

CHARLES JEWETT, M.D.,

Professor of Obstetrics, Long Island College Hospital.

A. H. P. LEUF, M.D.,

Demonstrator of Anatomy and Histology and
Lecturer on Pathology at the Pennsylvania
School of Anatomy and Surgery.

W. T. BULL, M.D.,

Surgeon to New York Hospital.

R. G. ECCLES, M.D.

NEW YORK:

ANALYST PUBLISHING CO.

19 Park Place.

Entered at the Post Office at New York, N. Y., as second-class matter.
Copyrighted, 1889, by the American Medical Digest Publishing Company.

LACTOPEPTINE.

The most important Remedial Agent ever presented to the Profession for

Dyspepsia, Vomiting in Pregnancy, Cholera Infantum, Constipation, and all Diseases arising from Imperfect Nutrition.

LACTOPEPTINE precisely represents in composition the natural digestive juices of the Stomach, Pancreas and Salivary Glands, and will, therefore, readily dissolve all foods necessary for the recuperation of the human organism.

LACTOPEPTINE

IS COMPOUNDED WITH

Gentian, Iron, Strychnia, Bismuth, Quinia, Calisaya,
Cinchona and Phosphates,

And various Medications required in general Practice in the form of
ELIXIRS, SYRUPS, LIQUIDS, Etc.

Special Notice to the Medical Profession.

Whenever satisfactory results are not obtained from the administration of **Lactopeptine** we will consider it a favor if such facts are reported to us, for there can be no doubt that substitution of Pepsin or some of the cheap imitations of Lactopeptine has been practised, whenever the therapeutic activity of Lactopeptine is not uniformly demonstrated in its indications, *Send address for our new MEDICAL ALMANAC, containing valuable information.*

THE NEW YORK PHARMACAL ASSOCIATION

Box 1574.

NEW YORK.

SUCCUS ALTERANS.

(McDADE.)

SUCCUS ALTERANS is a purely vegetable compound of the preserved juices of *Stil-
liugia Sylvatica, Lappa Minor, Phytolacca Decandra, Smilax Sarsaparilla and Xanthox-
ylum Carolinianum*, as collected by Dr. GEO. W. McDADE exclusively for ELI LILLY &
Co., and endorsed by Dr. J. MARION SIMS.

SUCCUS ALTERANS continues to gain favor from its remarkable Alterative and
Tonic properties, *eliminating specific poison from the blood and increasing the proportion of
red corpuscles in anæmic patients* to a wonderful degree; is endorsed by the medical pro-
fession and in use by many hospitals of note.

SUCCUS ALTERANS in venereal and cutaneous diseases is fast supplanting Mercury,
the Iodides and Arsenic; and is a certain remedy for Mercurialization, Iodism and the
dreadful effects often following the use of Arsenic in skin diseases.

SUCCUS ALTERANS is also strongly recommended for its Tonic and Alterative effects
in myriad forms of scrofulous disease, and in all cases where anæmia is a factor. Such
patients rapidly develop a good appetite, sleep soundly and gain flesh rapidly. Many
cases are on record where patients increased ten to twenty-five pounds in weight in a
few weeks.

SUCCUS ALTERANS is giving satisfactory results in treatment of *Chronic Rheumatism*
and can be used with confidence.

SUCCUS ALTERANS may be given for any length of time, without injury to the
patient.

SUCCUS ALTERANS is put up in pint round amber bottles and *never in bulk.*

PHYSICIANS who have not received Dr. McDADE's latest publication, the *MONOGRAPHIA
SYPHILITICA*, should send their address, mentioning this journal, and we will mail a
copy. It contains a paper, illustrated with colored plates, by Dr. D. H. GOODWILLIE,
of New York, on the "Sequelæ of Syphilis," reports of cases in practice and many other
valuable papers.

ELI LILLY & CO., Pharmaceutical Chemists,
Indianapolis, Ind., U. S. A.

SUPPLIED BY ALL DRUGGISTS.

JOHN J. DONALDSON, President.

HERMANN SCHAEFFER, Vice-Prest.

A. L. DONALDSON, Treasurer.

THE DR. JAEGER'S Sanitary Woolen System Company,

827 & 829 BROADWAY, NEW YORK.

BRANCH HOUSES:

199 BROADWAY, New York,
(Western Union Building.)

366 FULTON ST., Brooklyn. N. Y.

We beg to call attention to our

COMPLETE ASSORTMENT

OF

Men's, Women's and Children's Underwear,

From the *heaviest* to the *lightest* weights; well known to be the finest and softest in the market, and *guaranteed* to be all pure wool.

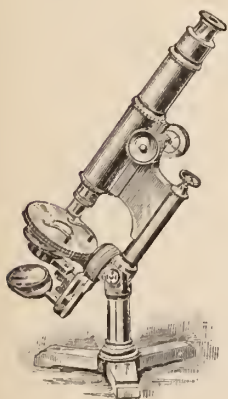
Catalogues, containing descriptions, illustrations, samples of materials, and a full price list, free by mail. *Mail orders promptly attended to.*

Orders for goods, by mail or express, and letters of inquiry, should be addressed to

Dr. JAEGER'S SANITARY WOOLEN SYSTEM COMPANY,

827 and 829 Broadway, New York.

New York, February 23, 1889.



BAUSCH & LOMB OPTICAL CO.,

MANUFACTURERS OF

Microscopes, Photographic Lenses, and
other Optical Instruments,

FACTORY AND OFFICE:

**531 to 534 North St. Paul Street,
ROCHESTER, N. Y.**

BRANCH OFFICE:

48 & 50 Maiden Lane, New York.

Catalogue Free.

INDEX.

MEDICINE.

| | PAGE | | PAGE |
|---|------|--|------|
| Antipyretics—Comparison of..... | 50 | Phthisis—Laryngeal..... | 62 |
| Aortic Insufficiency—Slight..... | 63 | “ Pulmonalis..... | 62 |
| Cough—Dr. Beck on..... | 63 | Rectitis—Iodoform in Chronic..... | 61 |
| Diphtheria—Etiology of..... | 51 | Sputa—Disinfection of..... | 62 |
| Glycerine Suppository..... | 61 | Teeth—Gargle to Prevent Loosening..... | 56 |
| Hydrophobia—Dr. Dulles on..... | 52 | Tetanus—Treatment of Acute Stage..... | 56 |
| Insensibility—Varieties of..... | 58 | Therapeutics—Value of Water in..... | 54 |
| Iodoform in Chronic Rectitis..... | 61 | Typhoid Fever—Atypical Forms..... | 49 |
| Obesity—Treatment of..... | 53 | Water—Value of, in Therapeutics..... | 54 |
| Pericarditis—Purulent, Aspiration and Drainage in.. | 63 | | |

SURGERY.

| | PAGE | | PAGE |
|---|------|---|------|
| Abdominal Cavity—Surgery of..... | 51 | Mercurial Poisoning from Subcutaneous Injections
of Calomel..... | 60 |
| Adenitis Cervical—Surgical Treatment..... | 56 | Mucous Grafts—Transplantation..... | 51 |
| Amputations—General Principles, Dennis..... | 52 | Ophthalmoscopy—New Method..... | 62 |
| Anæsthetics—Dr. White on..... | 54 | Orbit—Recurrent Cyst of..... | 62 |
| Aneurisms—Treatment of, by Dr. Scheck..... | 50 | Orchitis—Pulsatilla in..... | 58 |
| Antiseptic Dressing..... | 57 | Patella—Fracture of, Silk Ligature in..... | 49 |
| Cyst of Orbit—Recurrent..... | 62 | Pterygoidal Plaques..... | 59 |
| Gonorrhea—Abortive Treatment of..... | 59 | Syphilis—Abortive Treatment..... | 61 |
| Gonorrheal Orchitis—Pulsatilla in..... | 58 | “ Wood on..... | 61 |
| Graftings—Heel restored by..... | 58 | Syphilitic Labial Fissures..... | 59 |
| Heel Restored by Graftings..... | 58 | Teeth—To Extract, Painlessly..... | 52 |

DISEASES OF WOMEN AND CHILDREN, AND OBSTETRICS.

| | PAGE | | PAGE |
|---|------|---|------|
| Artificial Suckling..... | 64 | Metrorrhagias—Salicylic Acid in..... | 53 |
| Boys—Hysteria in..... | 58 | Night Terrors..... | 58 |
| Cervix Uteri—Lacerated—Goodell..... | 49 | Peritoneum—Flushing of..... | 54 |
| Childhood—Mineral Waters in..... | 57 | Pertussis—Sulphurous Acid Fumigations in..... | 57 |
| Children—Constipation in..... | 61 | Pessaries—Wylie on..... | 53 |
| “ Doses of Medicine..... | 61 | Pregnancy—Delivery at Sixth Month..... | 64 |
| “ Incontinence of Urine in..... | 58 | “ Ingluvín in Vomiting..... | 64 |
| Dysmenorrhœa—Hanks on..... | 54 | Round Ligaments—Shortening..... | 51 |
| Incontinence of Urine..... | 58 | Thrush—Treatment of..... | 61 |
| Infantile Diarrhea—Magisterium Bismuthi in..... | 58 | Uterine Hemorrhage..... | 51 |
| Infancy—Relations of, to Tuberculosis..... | 58 | Uterus—Displacement of..... | 51 |
| Infants—Functions of Stomach, Washing out..... | 59 | “ Parturient—Hernia of..... | 62 |

Specify "Battle" when Prescribing Our Preparations.

Specify "Battle" when Prescribing Our Preparations.

BROMIDIA

THE HYPNOTIC.

FORMULA.—

Every fluid drachm contains 15 grains EACH of Pure Chloral Hydrat. and purified Brom. Pot., and one-eighth grain EACH of gen. imp. ext. Cannabls Ind. and Hyoscyam.

DOSE.—

One-half to one fluid drachm in WATER or SYRUP every hour, until sleep is produced.

INDICATIONS.—

Sleeplessness, Nervousness, Neuralgia, Headache, Convulsions, Colic, Mania, Epilepsy, Irritability, etc. In the restlessness and delirium of fevers it is absolutely invaluable.

IT DOES NOT LOCK UP THE SECRETIONS.

PAPINE

THE ANODYNE.

Papine is the Anodyne or pain-relieving principle of Opium, the Narcotic and Convulsive Elements being eliminated. It has less tendency to cause Nausea, Vomiting, Constipation, Etc.

INDICATIONS.—

Same as Opium or Morphia.

DOSE.—

(ONE FLUID DRACHM)—represents the Anodyne principle of one-eighth grain of Morphia.

BATTLE & CO.,

CHEMISTS' CORPORATION,

BRANCHES:

76 New Bond Street, London, W.

5 Rue de la Paix, Paris.

9 and 10 Dalhousie Square, Calcutta.

ST. LOUIS, MO.

COLDEN'S LIQUID BEEF TONIC.

ORIGINAL LABEL:
"Colden's Liebig's Liquid Extract of Beef
and Tonic Invigorator."

An Invaluable Aid in the Treatment of all Cases of Debility.

ESTABLISHED 15 YEARS. ENDORSED BY SCORES OF PHYSICIANS. BEWARE OF IMITATIONS.

ESSENTIALLY DIFFERENT FROM ALL OTHER BEEF TONICS.

COLDEN'S LIQUID BEEF TONIC consists of the Extract of Beef (by Baron Liebig's process), spirit of Iron, Cinchona, Gentian, and simple aromatics. An official analysis of this preparation by the eminent chemist, ARTHUR HILL HASSALL, M.D., F.R.S., and an endorsement of by SIR ERASMUS WILSON, F.R.S., is printed on the label of each bottle.

In the treatment of all cases of Debility, Convalescence from severe illness, Anæmia, Malarial Fever, Chlorosis, Incipient Consumption, Lack of Nerve Tone, and of the Alcohol and Opium Habits, and all maladies requiring a Tonic Nutrient, it is superior to all other preparations.

It acts directly on the sentient gastric nerves, stimulating the follicles to secretion, and gives to weakened individuals that first prerequisite to improvement, an appetite.—By the urgent request of several eminent members of the medical profession, I have added to each wineglassful of this preparation two grains of SOLUBLE CITRATE OF IRON, and which is designated on the label WITH IRON, "No. 1," while the same preparation, WITHOUT IRON, is designated on the label as "No. 2."

I will, upon application, send a sample bottle of COLDEN'S LIQUID BEEF TONIC to any physician in regular standing. Please ask your Dispensing Druggist (if he has not already a supply) to order it. In prescribing this preparation physicians should be particular to mention "COLDEN'S," viz., "EXT. CARNIS FL. COMP. (COLDEN)." It is put up in pint bottles, and CAN BE HAD OF WHOLESALE AND RETAIL DRUGGISTS GENERALLY THROUGHOUT THE UNITED STATES.

C. N. CRITTENTON, Sole Agent, 115 Fulton Street, New York.

GLENN'S SULPHUR SOAP.

All physicians know the great value of the local use of Sulphur in the TREATMENT OF DISEASES OF THE SKIN. GLENN'S SULPHUR SOAP is the ORIGINAL and BEST combination of its kind, and the one now generally used. For sale by all Druggists at 25 cents a cake, or three cakes for 60 cents. Beware of counterfeits.

Wholesale Depot, C. N. CRITTENTON, 115 Fulton Street, New York.

Please mention this Journal.

CONSTANTINE'S PINE TAR SOAP.

BY FAR THE BEST TAR SOAP MADE. Has been on trial among physicians for very many years as a toilet soap and healing agent, and its superior virtues have been unanimously conceded in ALL CASES WHERE THE USE OF TAR IS INDICATED.

Unsolicited expressions of its excellence have been received from the Medical Faculty generally. None genuine unless stamped "A. A. Constantine's Persian Healing Pine Tar Soap." For sale by all Druggists.

Samples of above Soaps sent FREE on application to any physician enclosing card.

Carnrick's Soluble Food

IS THE NEAREST APPROACH TO HUMAN MILK THAT HAS THUS
FAR BEEN PRODUCED.

During the past season a large number of Physicians and eminent Chemists visited our Laboratory at Goshen, N. Y., and witnessed every detail connected with the production of CARNRICK'S SOLUBLE FOOD. This invitation to witness our process is continuously open to Physicians and Chemists. All expenses from New York to Goshen and return will be paid by us. The care used in gathering the milk, its sterilization, and the cleanliness exercised in every step, cannot be excelled.

Pancrobilin.

Prepared (in both Liquid and Pill form) from Extract of Pancreas and Bile.

This preparation is designed expressly to increase the digestion and absorption of fats.

We believe that the fat-digesting properties of pancreatine and bile are inseparable, and that without their union in the intestinal tract but little, if any, fat would be digested and absorbed.

PANCROBILIN will be found of great service in *Phthisis* and other wasting diseases, *Nervous Prostration*, *Constipation*, *Inanition*, *Malnutrition*, *Intestinal Indigestion* and wherever there is a failure to assimilate fats.

If the skin is first wet with LIQUID PANCROBILIN, the inunction of oils will be greatly facilitated.

LIQUID PANCROBILIN is put up in pound bottles.

PILL PANCROBILIN is put up in bottles holding 100 pills. The coating of the pills will resist acid digestion when given as directed, but will be quickly dissolved in the alkaline secretions of the duodenum.

Phospho-Caffein Comp.

(Granular Effervescing.)

Formula for each dessertspoonful :—

Caffein.

Acidi Phosphorici ää, grains, ss.

Antipyrin.

Ext. Apii. Grav. dulc. (Celery), ää grains, i.

Sodium Bromide, grains, v.

The satisfactory results produced by PHOSPHO-CAFFEIN COMP. in *Headaches*, *Neuralgia*, *Insomnia*, *Neurasthenia* and general *Nervous Irritability*, are not due to the effect of any one ingredient, but to the happy effect of the combination. A thorough series of comparative tests have demonstrated the superiority of the above formula over any other in the market.

REED & CARNRICK, New York.

An Important Communication TO PHYSICIANS.

Thirteen years have now elapsed since the introduction of SCOTT'S EMULSION of PURE NORWEGIAN COD LIVER OIL with HYPOPHOSPHITES of LIME and SODA, since which time its growth and development have been very large, not only in this country but in South America, Great Britain and a large part of Continental Europe, and it has, in a very large degree, supplanted the Plain Cod Liver Oil. Its success is largely due to the happy combination of all its components, making a perfect chemical union, that will not separate for years, which we believe is not true of any other Cod Liver Oil preparation.

The innumerable reports from Physicians, of the brilliant results obtained justifies the statement that in almost every case where Cod Liver Oil is indicated, the combination of Cod Liver Oil with the Hypophosphites as prepared in Scott's Emulsion is infinitely superior.

Physicians who have never tried this Emulsion, or who have been induced to try something else in its stead, will do us the favor to send for sample, and we know they will always use it in preference to plain Cod Liver Oil or any other preparation.

We also call your attention to the following preparations :

CHERRY-MALT PHOSPHITES.

A combination of the tonic principles of Prunus Virginiana, Malted Barley, Hypophosphites of Lime and Soda, and Fruit Juices. An elegant and efficient brain and nerve tonic.

BUCKTHORN CORDIAL (Rhamnus Frangula.)

Prepared from carefully selected German Buckthorn Bark, Juglans Bark, and Aromatics. The undoubted remedy for Habitual Constipation. Send for samples of the above—delivered free.

SCOTT & BOWNE, Mfg. Chemists, 132 & 134 S. 5th Ave., N. Y.

Electro-Medical Apparatus.

Special attention is hereby called to my new and improved

CAUTERY BATTERY.

Its advantages are: its simple construction, perfect operation, low price, and durability. I will furnish this Battery complete and ready for use, for \$18, including the following attachments, viz.: Handles and Cords, 1 Knife, 1 Point, 1 Ecraseur. Over 200 now in successful operation in New York City. All Batteries guaranteed for 1 year. Address

MENO FEDDERN,

Park Ridge, Bergen Co., New Jersey.

I will gladly call and exhibit my Batteries at the office of any physician residing in New York or vicinity.

Send for

CLUB RATES on

MEDICAL JOURNALS

To ANALYST PUBL'G CO.,

19 Park Place, N. Y.

MEDICAL PRACTICES AND DRUG Stores, Bought and Sold. Lists Free. Address: THE MEDICAL TRANSFER BUREAU, Lynn, Mass.

THE BEST OF AMERICAN.

Specify

PLANTEN'S CAPSULES.

Known as Reliable over 50 years for "General Excellence."

Established 1836.

H. PLANTEN & SON, 224 William Street
NEW YORK.

SOFT and HARD CAPSULES

FILLED, OF ALL KINDS.

Nine Sizes: 3, 5, 10 and 15 Min. and 1, 2½, 5, 10 & 15 Gram.

NEW KINDS:

WINTERGREEN, APIOL,

Sandalwood, Erigeron, Terebene, Etc.

Improved. Empty, 8 sizes.

Capacity in Grains: 12, 10, 5, 4, 2, 1, ½, ¼.
For taking medicines free of taste, smell, injury to the teeth, mouth or throat.

Rectal, Vaginal, Horse, For Liquids
3 Sizes. 6 Sizes. 6 Sizes. 8 Sizes.

Trial box of all above Empties, by mail, 25 cents,

Capsules for Mechanical Purposes.

New Articles, and Capsuling Private Formulæ, a Specialty. Sold by all Druggists. Samples free.

Specify PLANTEN'S on all orders.

THE BEST ANTISEPTIC.

FOR BOTH INTERNAL AND EXTERNAL USE.

LISTERINE.

Formula.—Listerine is the essential antiseptic constituent of Thyme, Eucalyptus, Baptisia, Gaultheria and Mentha Arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzo-boracic Acid.

Dose.—Internally: One teaspoonful three or more times a day (as indicated), either full strength, or diluted, as necessary for varied conditions.

LISTERINE is a well-proven antiseptic agent—an antizymotic—especially adapted to internal use, and to make and maintain surgical cleanliness—asepsis—in the treatment of all parts of the human body, whether by spray, irrigation, atomization, or simple local application, and therefore characterized by its particular adaptability to the field of

PREVENTIVE MEDICINE—INDIVIDUAL PROPHYLAXIS.

Physicians interested in LISTERINE will please send us their address, and receive by return mail our new and complete pamphlet of 40 quarto pages, embodying:

A TABULATED EXHIBIT of the action of LISTERINE upon inert Laboratory Compounds;

FULL AND EXHAUSTIVE REPORTS and clinical observations from all sources, confirming the utility of LISTERINE as a General Antiseptic for both internal and external use; and particularly

MICROSCOPIC OBSERVATIONS, showing the comparative value and availability of various antiseptics in the treatment of Diseases of the Oral Cavity, by W. D. MILLER, A.B., Ph.D., D.D.S., Professor of Operative and Clinical Dentistry, University of Berlin, from whose deductions LISTERINE appears to be the most acceptable prophylactic for the care and preservation of the teeth.

DISEASES OF THE URIC ACID DIATHESIS.

LAMBERT'S

LITHIATED HYDRANGEA.

KIDNEY ALTERNATIVE—ANTI-LITHIC.

Formula.—Each fluid drachm of "Lithiated Hydrangea" represents thirty grains of FRESH HYDRANGEA and three grains of CHEMICALLY PURE Benzo-Salicylate of Lythia. Prepared by our improved process of osmosis, it is INVARIABLY of DEFINITE and UNIFORM therapeutic strength, and hence can be depended on in clinical practice.

Dose.—One or two teaspoonfuls four times a day (preferably between meals.)

Urinary Calculus, Gout, Rheumatism, Bright's Disease, Diabetes, Cystitis, Hematuria, Albuminuria, and Vesical Irritations generally.

WE have had prepared for the use of Physicians **Dietetic Notes**, suggesting the articles of food to be allowed or prohibited in several of these diseases.

A neatly bound book of these Dietetic Notes, each note perforated for the convenience of Physicians in detaching and distributing to their patients. Mailed gratis upon request, together with our latest compilation of case reports and clinical observations, bearing upon the treatment of this class of diseases.

LAMBERT PHARMACAL COMPANY,
SAINT LOUIS.

BRIGHT'S DISEASE.

DIETETIC NOTE.—A rigid milk diet has given good results in many cases.

Allowed.—Fish, sweet breads, sago, tapioca, macaroni, baked and stewed apples, prunes, etc.; spinach, celery, lettuce, etc., may be used in moderation in connection with a milk diet, with impairing its effect, and with great comfort and enjoyment to the patient.

Avoid.—Strong coffee and tea, alcoholic stimulants, soups and made dishes.


April 15, 1889.

No. 4, Vol. VIII.

THE
AMERICAN MEDICAL DIGEST
ISSUED MONTHLY.

A DIGEST OF CURRENT MEDICAL LITERATURE,
ABSTRACTS AND REVIEWS; IN THREE PARTS:
MEDICINE,—SURGERY,—DISEASES OF
WOMEN AND CHILDREN,
AND OBSTETRICS.

PART I.
MEDICINE.

 Address all communications on Advertising, Subscription and Editorial business, Books for reviewing, etc., to the Publishers,

THE ANALYST PUBLISHING CO.,

19 Park Place, New York.

THE NEW HYPNOTIC SULFONAL-BAYER.

SULFONAL was discovered by Prof. Eugen A. Baumann, of Freiburg University, and was first prepared by the Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld.

SULFONAL (Diethylsulfondimethylmethan) is in the form of colorless prisms, odorless and tasteless, melting at 125.5° C. (258° F.) and has the composition $(C_2H_5)_2C=C(C_2H_5SO_2)_2$. It is slightly soluble in cold water, but easily soluble in hot water or alcohol.

SULFONAL was first examined as to its physiological and pathological effects by Prof. A. Kast, of Freiburg University, and its hypnotic action was discovered and studied by him.

Since then SULFONAL has been the subject of numerous trials and experiments by many eminent and experienced physicians. Their testimony is unanimously favorable, and the conclusions reached by them are as follows:

SULFONAL is a prompt and reliable hypnotic which in proper doses produces quiet, natural sleep, lasting a number of hours.

SULFONAL has no unfavorable effects on the heart and the circulation, nor on the temperature, the pulse, or the respiration.

SULFONAL produces no disagreeable secondary symptoms; the patients with very few exceptions awake from their sleep feeling strong and greatly refreshed.

SULFONAL does not interfere with the process of digestion.

SULFONAL is a hypnotic, and not a narcotic; it acts by giving rest to the cells of the cerebral cortex, thereby causing sleep.

SULFONAL does not create an unconquerable desire for its repeated use; there is no danger of a SULFONAL-habit. Neither is it necessary to increase the dose after long-continued use.

SULFONAL is best administered at supper time, dissolved in hot liquids, *e. g.*, a bowl of soup or broth, a cup of milk, tea, coffee, cocoa, etc.

These points will be found to be fully exhibited in the series of contributions contained in our pamphlet, which will be mailed on application.

SULFONAL-BAYER is supplied by us in half-ounce and one-ounce vials.

We prepare 5-grain and 15-grain Tablets of Sulfonal-Bayer. The Tablet form is admirably adapted to the purpose of administering this drug, as when they are placed in the liquids, they disintegrate and are thus received into the system.

We also put up Sulfonal-Bayer in the form of our Soluble Pills, containing five grains each.

THE NEW ANTIPIRETTIC PHENACETINE-BAYER.

Phenacetine-Bayer (Para-Acetphenetidine) is a white, glossy, crystalline powder, perfectly tasteless, melting at 135° C.—307° F. and has the composition $C_8H_9 \begin{smallmatrix} O.C_2H_5 \\ NH(CO-CH_3) \end{smallmatrix}$.

It is slightly soluble in water, a little more soluble in glycerine, but most freely in alcohol.

Phenacetine-Bayer was first prepared by the Farbenfabriken, formerly Friedr. Bayer & Co., Elberfeld, and is of absolute purity and uniform quality.

Summarizing the superiority of Phenacetine-Bayer over other antipyretics and antineuralgics, the following conclusions are formed.

1. Phenacetine-Bayer is an efficacious antipyretic.
2. It does not develop any disagreeable or noxious after effects.
3. The dose required is half that of Antipyrine.
4. It is perfectly tasteless.
5. On account of its innocuousness and tastelessness, it is a valuable antipyretic both in adults and in children.
6. Phenacetine-Bayer is an important antineuralgic; its effect is more energetic than that of Antipyrine and does not cause lassitude or any other disagreeable symptoms.

Our Pamphlet on Phenacetine-Bayer, containing the valuable testimony of eminent physicians will be mailed on application.

We offer Phenacetine-Bayer in one-ounce vials, or in the form of our Soluble Pills of the strength of two and four grains to each pill.

W. H. SCHIEFFELIN & CO.,
170 & 172 WILLIAM STREET, NEW YORK,

Sole Licensees and Sole Agents for the United States.

Please mention the MEDICAL DIGEST.

CONSTITUTIONAL DISEASES.

Atypical Forms of Typhoid Fever.

At a recent meeting of the Virginia Medical Association, this subject was fully discussed by Dr. W. C. DABNEY and others.

Dr. D. took the ground that the disease had become distinctly milder of late years, and that the symptoms, such as diarrhea, eruption, and the gradual rise of temperature, which were formerly considered characteristic, were now often absent. That these cases were genuine typhoid fever he considered proved by the following well established facts:

1. The cases usually presented some of the peculiar characteristics of the disease.
2. Hemorrhage from the bowels occasionally occurred in these cases.
3. The intestinal lesions characteristic of typhoid fever had been found on post-mortem examination.
4. These mild cases were capable of originating epidemics of typical character.

The conclusions at which he arrived were as follows:

1. That the disease in this country was gradually becoming milder, and that symptoms which were formerly thought to be characteristic and almost invariable were now much less frequently present.
2. That the diagnosis of the disease was often attended with extreme difficulty, and in the early stages was impossible.
3. That in those cases which were apparently extremely mild, dangerous symptoms might arise suddenly, and a fatal issue might ensue from errors in diet or other imprudence.
4. That in all doubtful cases precautions should be taken to prevent

the spread of the infective principle or germ, and to guard the patient against dangers from imprudence.

5. That the dangers to be especially apprehended in these cases were exhausting diarrhea, hemorrhage, and perforation of the bowel.

6. That, in view of this danger, patients should be placed upon liquid diet, should be confined to bed, and constipation, when present, should be relieved by enemata, and not by purgatives, even of the mildest character.

Dr. John H. Claiborne, of Petersburg, had prepared a paper to be read in the discussion, of which the following is an abstract: The title of the subject under discussion presupposed, of course, that there was a typical or representative form of typhoid fever. Such a case should show, some time during its course, symptoms of stupor, or at least dullness of intellect or hebetude, a muttering or passive rather than an active delirium; there should be a certain form of diarrhea, a peculiar but pathognomonic rose colored eruption on or about the fourteenth day, and epistaxis, ordinarily slight. The fever was, to a certain extent, self-limited, and was perhaps mildly infectious; it generally attacked adolescents of both sexes, had its own recognized microbe, and, above all, a post-mortem should disclose, unquestionably and distinctly, infiltration or ulceration of the glands of Peyer. To these general symptoms might perhaps be added slight bronchitis, headache, anorexia, flushing of the cheeks, and a temperature progressively rising and subsiding.

The question now arose, How many and which of these pathognomonic symptoms or lesions could be eliminated from a typical case to leave an unquestionable case of atypical typhoid fever—a recognizable entity? Or, if we

were not in danger of multiplying words, were we not in danger of multiplying diseases to the confusion of diagnosis?

There was a summer and autumnal fever common to many sections which it had become fashionable to note as typho-malarial fever—a term originated by the late Dr. J. J. Woodward, of the United States Army, during the late war. Ten years later, however, he had confessed himself mistaken as to his original idea that it was a substantive fever having its own symptoms and its own pathological lesions; yet the name had never perished, and there was no special objection to its use so long as the facts connected with its history were remembered. Wherever there was malaria (which seemed to be ubiquitous) there was typho-malarial fever. Dr. Cutter had published, in parallel columns, the diagnostic marks of typhoid fever and the so called typho-malarial fever, which threw good light on the present question, and placed the atypical form of typhoid fever where it of right belonged—namely, in the class of ordinary bilious remittent fever. Remittent, or any other fever, might assume, under certain unsanitary or depressing influences, a typhoid character; but that did not constitute it the peculiar intestinal, or enteric, or typhoid fever of Louis, of Gerhardt, or of Wood; nor was there any blending of the two forms—any swapping or coincident or concurrent cultivation of the microbes peculiar to each. Besides, the early, honest, and judicious administration (but not in pill nor in capsule form) of quinine usually cut short an attack of typho-malarial fever, which it did not do in typhoid fever. A mild mercurial every night, guarded or not with opium, according to the condition of the bowels, and from a scruple to half a dram of quinine

sulphate at the period of remission, with fifteen grains of acetanilide or twice as much antipyrine, in three doses, at the period of exacerbation, would ordinarily cut short the hybrid fever in from five to ten days.

Dr. W. G. Rogers, of Charlottesville, presented a paper tending to strengthen existing evidence that drinking polluted water was a common cause of typhoid fever. Since the establishment of the Charlottesville Water-works, supplied by pure mountain streams, the disease had almost entirely disappeared from his city; and the cause of the few cases that had lately occurred could be easily traced to the drinking of water of wells dug at points where they necessarily received the percolations of surface sewerage, etc. Among these few cases he detailed reports of several atypical cases of typhoid fever. A boy ten years old had all the usual signs and symptoms except fever itself, the temperature being even subnormal—from 96° to 98° —and his pulse varied from 48 to 50 only for three weeks, and then became normal in frequency.

Comparison of Antipyretics.

DR. M. F. GATES, in an article published in the *Medical Times*, makes the following interesting comparisons from clinical experiments made at the Medico-Chirurgical Hospital, Philadelphia:

The special point at issue was to determine which produced the most equable temperature.

Two patients suffering from hectic fever, due to chronic pneumonic phthisis, were selected, and to them the drugs were administered for varying periods, but under similar conditions.

Their relative effectiveness seems to be best shown by comparing the average daily range of temperature during the administration of each.

For a period of four days one of the patients took nothing of an antipyretic nature, and had an average daily temperature range of 3.4° F., which may be considered as the probable range, if unmodified by treatment.

The following is a table showing the average range under the use of various agents, and the number of days each was given, arranged in the order of their effect.

| | Medicament. | Daily Dose. | Average Range. | How Given. | No. of Days. |
|----|--------------------------|----------------------|----------------|------------|--------------|
| 1 | Acetanilid. | 20 grains. | .7833+ | Broken. | 24 |
| 2 | Phenacetine. | 6 to 12 grs. | 1.1458+ | Broken. | 15½ |
| 3 | Antipyrin. | 15 grains. | 1.4666+ | Broken. | 3 |
| 4 | Phenacetine. | 6 to 12 grs. | 1.9443 | Both ways. | 35½ |
| 5 | Phenacetine. | 10 to 12 grs. | 2.1089+ | Single. | 12½ |
| 6 | Creosote and Acetanilid. | 5 gtt. and 5 grains. | 2.1892+ | Broken. | 21 |
| 7 | Niemeyers's pills. | Three. | 2.7079- | l. t. d. | 24 |
| 8 | Acetanilid. | 6 grains. | 2.9844+ | Broken. | 9½ |
| 9 | Nothing. | | 3.40 | | 4 |
| 10 | Phenacetine. | 7 grains. | 3.5321+ | Broken. | 7½ |
| 11 | Creosote. | 3 to 15 gtt. | 3.6503 | Broken. | 26½ |

From this we see that a uniform temperature was best maintained by acetanilid in 5 grain doses four times a day ; with phenacetine, 12 grains a day, given in divided doses second ; and antipyrin, 15 grains a day third. Creosote, and small doses of phenacetine, gave ranges greater than when nothing was taken.

In the extreme range, from the highest to the lowest recorded temperature, the greatest— 7.2 degrees—was noted while creosote was being administered, and the least— 3.6 degrees—when antipyrin was used. However, acetanilid in large doses gave, in one set of experiments, a maximum range of 4 degrees, and in another of 3 degrees, which is the lowest extreme range found in any single trial ; but in doses of 6 grains a day, it gave a range of 5.6 degrees, which sets it back, in the table, to fourth place.

Creosote alone gave a maximum range of 6.2 degrees, and an average range of 3.65, while its combination with a daily

dose of 5 grains of acetanilid gave a maximum range of 5.2 degrees, and an average range of 2.18 degrees, a reduction of 2 degrees and 1.5 degrees respectively.

The experiment covered in all a period of $147\frac{1}{2}$ days' time.

We have since tried phenacetine in two cases for a period of five days each, giving each patient gr. v. four times a day.

The average range was 1.78 degrees, the extreme range, 4.2 degrees, and the highest point reached, 101.6 degrees.

Etiology of Diphtheria.

FROM a recent correspondence of the *Medical Register*, we clip the following :

The Etiology of Diphtheria was the subject of a paper read before the Cincinnati Academy of Medicine recently, by Dr. B. K. RATCHFORD, bacteriologist to the Medical College of Ohio. He stated as the object of his paper the discovery of the truth or falsity of the opinion that diphtheria is a local disease and that the constitutional symptoms are produced by poisonous materials absorbed from the local lesion, and to study certain other points relating to the etiology of this disease. After a thorough discussion, he arrives at the conclusion that the constitutional symptoms of diphtheria, including the after paralysis, are produced either directly or indirectly by ptomaines. Immunity he found a most obscure chapter.

In conclusion the Doctor summarized the following conclusions :

1. Diphtheria is a purely local disease.
2. It is caused by an external parasite.
3. This parasite is practically if not strictly aerobic.
4. The constitutional symptoms are due to the absorption of poisonous ma-

terials, viz.: ptomaines from the local lesion.

5. The changes occurring in the blood and tissues, including the nerve lesions, are caused by direct or indirect action of ptomaines.

6. The disease has no latent stages, and second and third attacks are due to reinfection.

7. One attack, as a rule, gives at least temporary immunity.

8. After the limited period of immunity has expired, the previous attack may act as a predisposing cause to other attacks, if it has left the mucous membrane of the throat in an irritated and inflamed condition. This is more likely to occur in scrofulous subjects.

9. Complications may occur from the entrance into the body of septic germs.

Upon these points he lays down the following rules of treatment:

1. Dissolve away the membrane, possible, and irrigate thoroughly and frequently with an antiseptic solution, the local lesion, for the double purpose of washing away the poisonous alkaloids and retarding the growth of parasites.

2. In diphtheria of wounds, and in other parts where it is practicable, the thorough irrigation should be followed by a dressing which would exclude atmospheric air. This on account of the aërobic nature of the germ.

3. We should try to rid the system of the poisonous alkaloids by mild catharsis, free diuresis and diaphoresis, with remedies which do not have a depressing action on the heart.

4. We should seek to counteract the depressing effects of this poison on the heart and other tissues by abundant stimulation.

5. We should also seek to counteract its deteriorating influence on the blood by free exhibition of the great blood restorer—iron.

6. We should render the air of the sick room as nearly aseptic as possible, to prevent the entrance of adventitious septic germs.

7. Chronic glandular enlargement and other disease remaining about the throat should be cured before dismissal, else the patient warned against the future exposure to diphtheritic poison.

8. The patient should not be entirely dismissed from observation for two months, during which time he should receive tonics and good food.

9. A serious exacerbation of symptoms in any form of ulceration or catarrh of the stomach or intestines, occurring in a patient exposed to diphtheria, should lead us to suspect the disease in these parts and we should treat accordingly.

Hydrophobia.

DR. DULLES, in his report to the State Medical Society, calls attention to the following points, the result of a study of fifteen fatal cases:

1. The Effect of Anticipation of Hydrophobia.—This is said to have been present in seven of the fifteen cases, and may be suspected in more.

2. The Lack of Evidence of Rabies in the Animal which did the Biting.—Not one of the animals furnished more than ground for a suspicion that it was rabid. The fact that a fighting dog bites a man who interferes with it, is no evidence that it is rabid, nor is the manifestation of a vicious temper a good evidence of rabies. The same may be said of death in a fit.

3. The Effect of a Diagnosis of Hydrophobia.—In ten of the fifteen cases it is stated that the physicians made an early diagnosis of hydrophobia, and presumably they failed to conceal the fact from the patient.

4. The Effect of Applying the Test of the Water.—This is said to have

been done in seven of the fifteen cases, and it was probably done in almost all of them.

5. The Assertion that Canine Symptoms were Present.—Five of the patients are said to have whined, or howled, or snapped, or bitten at their attendants.

6. The Frequency of Forcible Restraint.—This is said to have been employed in eight of the cases.

7. The Uselessness of Administering Narcotics.—Powerful narcotics are said to have been used in ten of the cases, and they were probably used in all. Curare was used in four cases.

The Treatment of Obesity.

DR. W. T. SMITH (*British Medical Journal*) reports a method of reduction of obesity which proved so successful, that he has tested it in forty-two other cases, in most of which success was obtained. The plan which he follows is to confine the diet to rump steak, codfish and hot water for fourteen days, with the absolute exclusion of everything else. Taking meat in large quantities may lead to dyspepsia, but this can be easily overcome by reducing the meat to an essence. This may be done as follows: Take four pounds of beef, free from skin and fat; cut it to pieces about an inch square; place the meat in a close fitting, air tight jar; stand the jar in a pan of boiling water, and let it simmer for six hours. Pass the juice of the meat thus obtained through a sieve; then measure four ounces of the fibrin of the meat; pulverize it in a mortar, and stir it up with the essence; divide this into four doses, and you will obtain the nitrogenous elements required of the quantity of meat to be taken at one meal. There is also a similar way of obtaining meat essence by using a pot called "Boule Américaine."

In treating his cases, in several instances he has been obliged to modify the amount of hot water and lessen occasionally the quantity of meat; but as regards his own personal experience, he found that three pounds of rump steak and one pound of codfish were hardly sufficient to satisfy his appetite. The meat diet and hot water alone must be regularly adhered to for fourteen days, and the amount of hot water, taken at any time during the day, commencing at seven in the morning and finishing at half-past ten at night, varies from six and one-third pints, more or less, according to the powers of the patient.

The second epoch of twenty-one days the diet may be considerably varied, as he reduces the hot water to four pints in the twenty-four hours, and he allows other kinds of meat, such as mutton chops, free from fat, and chicken; and, as regards fish, grilled turbot, whiting, or soles; a little green vegetable, and some slices of plain unsweetened rusk.

The third epoch, thirty-one days, the hot water is reduced to about a quart a day, and he allows tea, stale bottom crust of household loaf, captain's biscuits, grilled fish, fowl, game, turkey, any joint, hock or claret, with seltzer water, in place of whiskey. As hot water is very unpalatable, a slice of lemon may be added to each tumbler.

No case of obesity should be treated by this method when the patient is suffering from any organic disease, unless it be some trifling malady. The loss of weight in nearly all cases will vary somewhat, but Dr. Smith states that his patients bear the treatment exceedingly well, and express themselves as feeling far better in health and able to take exercise with comfort. The first period of fourteen days is really the only hard-

ship, and he has found very little difficulty in persuading patients to stick to the diet. As some alkali is essential, he prescribed five grains of the bicarbonate of potassium, to be taken night and morning. Dr. Smith offers to send his diet cards to any medical practitioner who will write to him, but asking that the result of any case under treatment be reported.—*Therapeutic Gazette*.

Value of Water in Modern Therapeutics.

DR. SIMON BARUCH, in a comprehensive paper on this subject, presented a clinical study of methods and applications in various diseases and their results. Unusual interest being aroused among various members of society, it was determined to devote the next meeting to the discussion of the paper.

The reader premised that he was not coming forward as a hydropath, and was actuated by no enthusiasm for a single truth to the exclusion of all others. He had as a clinician collected points from his own experience which seemed well founded, and had added ideas taken from the best writers both here and abroad. He would first present an account of the ascertained uses of cold water in therapeutics, then of hot water, then of moist applications. A great deal of attention to details was very important in getting results from the various uses of water. The text books never treated of the subject fully enough, considering its moment. External applications of water were now a very essential part of surgery. Its value had been imperfectly ascertained during the recent rebellion, when it had been applied to wounds by sponges and wet compresses; these were now replaced by irrigations of boiled water or antiseptic solutions and by permanent absorbent dressings. It was just beginning to be recognized that heated

water was better for this purpose than cold water, and that boiled water was quite as good as water charged with germ destroying drugs, if not better. Very hot water as a styptic and a preventive of shock was not so widely recognized as it should be. A notable illustration of its value in this direction was its efficacy in arresting post-partum hemorrhage, without forming the clots which resulted from persulphate of iron injections. The hot douches used in gynecology to remove inflammation were another important use of hot water. But here, too, there must be great attention to detail. Dr. Emmet had insisted that the patient must be in a reclining posture, the temperature of the water not far from 110° F., and the stream intermittent and applied by a nurse; he could tell by an examination with the fingers in a series of patients which of them had received the douches properly. When he turned to the uses of water in skin diseases we came upon its first contra-indication—namely, in diseases of which eczema was the type. He had known cures to result from a simple avoidance of water after applications of oxide of zinc ointment and tar and rubber gloves had all failed even to relieve. A similar beneficial change in our ideas had led to the dry boric acid packing in suppurative otitis media in place of the frequent injections of water. The odor and discharge were thus cured at once, even after having persisted for years. The vaginal injection following normal labor was another bad thing which was going out of vogue.

The internal applications of water were only beginning to be known at all widely, and were often not alluded to in the text books. The author then reviewed the various conditions in which irrigation of the stomach by the soft-

rubber tube had been found of value—dilatation, gastritis, fermentation of retained food, pain caused by *débris* not passed through the pylorus, and intestinal obstruction. He had also made the diagnosis between the more usual causes of dyspepsia and gastric neuralgia or ulcer of the stomach by examining the washings. The drinking of warm water to cleanse the stomach must also be done methodically. Half a pint of hot water slowly sipped an hour before meals had been found by examination to cleanse the stomach of mucus. An occasional washing of the stomach five hours after eating much increased the benefit to be gained by sipping water. Irrigations had also been used with benefit in the gastro-intestinal affections of children in summer and for jaundice caused by gall-stones.

Catarrhal jaundice was now treated by injections of two quarts of water, at a temperature of 60° F., into the large intestine, the patient being placed in the knee-elbow posture, and the water retained as long as possible; infantile diarrhea, by introducing a soft tube as far as the ileo-cæcal valve, and gently washing out the whole large intestine with water charged with bicarbonate of sodium.

Returning to cold water treatment, the author remarked that a mechanical and thermic influence were here to be taken into account. By proper manipulations, either hyperæsthesia or anæsthesia, hyperæmia or anæmia, could be produced in a given area. It acted by reflex nervous influence on the circulation, and the amount of reaction depended upon the shock, up to a certain point (which would vary with the strength of the patient). It changed nutrition by its effect on the blood vessels, heart, and respiration. It was thus of great utility in the treatment of

lithæmia and neurasthenia. If the condition was much reduced, the exposure must be very short; the colder the water and the briefer the contact, the better. A sheet dipped in ice-water and thrown about the body (in a warm room), followed by a vigorous rubbing and careful drying, so as to keep the patient in a glow, was an excellent mode of application, to which gastric and cardiac symptoms often yielded. By taking portions of the body separately this bath could be made useful even in cachectic states. In anæmic children it was more efficacious than cod liver oil, hypophosphites, iron, or pepsin. Cold water was of excellent use as an antipyretic in acute diseases, and acted partly as a stimulant to the nerve centres, enabling them to regain full control of the bodily temperature. This action was especially reliable in the high temperature of acute rheumatism, and also in that of insolation. After sunstroke the patient was to be sprinkled with cool water frequently, and cool water injected into the large intestine in large amount, since there was a lack of water in the blood. A high temperature occurred in summer diarrhea, and could be found by placing the thermometer in the rectum. There was often a rectal temperature of from 102° to 106° F., although the extremities were cold and clammy. Here a graduated cold bath was indicated; the patient was to be put into water at 95°, which was slowly cooled to 80°. The temperature was thus to be controlled for twenty-four hours. After such a bath the patient was to be placed in a cold pack and hot bottles put to the feet.

The most remarkable aid was now obtained from the cold bath in typhoid fever. The idea that its usefulness consisted in reducing the temperature in typhoid had been widely prevalent

and had prevented all who took this conception from realizing in what its real value consisted. In some records recently made of 7,000 cases of typhoid, 3,000 had been set down as fatal; besides this, it must be recognized that many really died of typhoid fever who were said to have had malarial disease. Dr. Delafield had placed the mortality in this country at nearly 25 per cent.; in Germany it has been placed at 21 per cent. The mortality in private practice in this city was also about a quarter, or as Dr. Delafield had estimated.

Since Brandt had published his invaluable researches as to the treatment of typhoid, and his method had become known in Germany, a partial application of it in a large number of cases had reduced the mortality from 21 to 7 per cent., and where it had been strictly followed, to only 1 per cent. Not a single patient had been lost who had come under treatment before the fourth day. Brandt had recorded that in certain military hospitals where the method had been used the mortality had fallen off from 26 to 4 per cent.

As soon as the temperature reached 102° F. the patient was to be put for fifteen minutes into a bath with a temperature of 65°, and this bath might be repeated in two or three hours if necessary. Immediately on taking him out the patient was to be wrapped in a thick linen sheet, rubbed well, blanketed, and given a stimulant. In case the heart was feeble and the nerve-centres were overcome (even with the temperature below 102° this might happen), the patient was to be put into a tepid half bath, and there be given affusions of cold water accompanied by active friction. This was the stimulating bath.

A wet compress was also to be kept upon the abdomen all the time. In these baths the benefit was derived al-

most entirely from the stimulus to the reflexes controlling circulation, respiration, and nutrition. Lung complications and heart weakness did not contra-indicate their use; the heart was in fact aided. With these baths all the symptoms became lighter, there was less stupor and less sleeplessness, the nerves and nervous centres were not so apt to be affected, and the tendency to intestinal ulceration, hemorrhages, and other complications was less. It was more a preventive than a curative remedy. Its statistical record was unparalleled. He had obtained very fair results for the past twelve years from a partial obedience to Brandt's instructions: a bath 10° below the body temperature, lowered gradually, after the patient was in it, to 68°. He had not thus obtained, and had not deserved to obtain such results as had followed when directions had been obeyed.—*N. Y. Medical Journal*.

Gargle to Prevent Loosening of the Teeth.

QUINCERAT: R. Acid tanic, 3 ij; tinct. iodi., gtt. 75; potas. iodid., gr. 16; tinct. myrrhæ, gtt. 75; aquæ rosæ, 3 6½. M.

A tablespoonful of this mixture in a third of a glass of warm water to bathe the gums with after finishing the toilette of the mouth, will, in the end, remedy the loosening of the teeth.—*Union Méd. de Paris*.—*Medical Reporter*.

DISEASES OF THE NERVOUS SYSTEM.

Treatment of the Acute Stage of Tetanus.

DR. J. C. MINOR read a paper with this title. He observed that the whole question was a study in toxicology, a matter of poisons and antidotes, the disease being the direct result of alkaloidal poisons thrown out by the germs which were the acting causes of tetanus. Three or four of them had been isolated, one of which gave rise to tetanus, a second

to tremors, paralysis, and convulsions, and a third to tonic and clonic spasms. The nervous centres in health had two forces which more or less balanced each other—the power to act when called into play, and the power of remaining at rest. The latter of these was lost in tetanus. The discharge of force was either incessant or with remissions due to simple exhaustion. Now, the production of toxic material seemed to be limited in time to three or four weeks, and, although 90 per cent. died before the production had ceased, there was always a chance—if life could be supported during the first two weeks, when the production was greatest—of the patients emerging from the toxic state and recovering. Most of those who died did so in the first week, and recovery mainly depended on treatment during that time. No means were known of expelling or neutralizing the poison of tetanus, but, as its action was expended on the cord and medulla, if we could so benumb these as to render them insensible to that action, the utmost was then done to prevent its otherwise fatal effect. The muscular spasms, which were clinically the important element in the disease, grew rapidly more intense and frequent, and death usually occurred in a spasm of extreme violence, which produced tonic contraction of the muscles of respiration and death by asphyxia. In some cases death came by cardiac failure or general exhaustion, but here, too, the spasms were the active cause. If their violence could be modified at the critical moments by having the nervous system previously under some other drug influence, the nerve-storm could pass safely over. Possession was here nine points of the law. Nothing short of toxic doses of eserine, chloral, or the bromides could displace the action of

tetanine when it once had the nervous centres under its influence ; but, on the other hand, it, too, was comparatively inert if those centres were already under an impression of an opposite sort.

Of the various drugs which depressed the action of the spinal cord, the reader himself preferred Calabar bean, chloral, and the bromides, with an occasional resort to chloroform in cases of very rapid development of the tetanine toxæmia, or in the culminating spasms of the crisis, where the treatment had previously been neglected or ineffectual. It then gave a temporary stay of proceedings, during which time chloral or Calabar bean could be given by the rectum or the hypodermic needle, so as to regain control.

For lessening muscular tension and preventing the spasms from the first, the salicylate of eserine was the best form in which to give Calabar bean. Just enough was to be given from time to time to prevent the rigidity from increasing to the point of spasm, increasing the doses and frequency with the progress of the disease toward its climax. The patient would then indeed be “between the devil and the deep sea,” because both remedy and disease were cumulative in action. It was often well here to substitute chloral rapidly.

The symptoms of poisoning by Calabar bean under these circumstances were painless diarrhea (easily checked by morphine), sudden extreme contraction of the pupils, profuse sweating, irregular tumultuous heart action, and dyspnœa. They could be relieved by about a fortieth of a grain of atropine or a quarter of a grain of morphine.

Throughout the disease quiet was absolutely essential to recovery, and proper nourishment second only to the medicinal treatment, if not equal in importance.—*N. Y. Medical Journal.*

VARIETIES OF INSENSIBILITY.

Prepared by Dr. Louis Lewis (*Medical World*).

| | CAUSES. | SYMPTOMS. | TREATMENT. |
|--|---|---|--|
| Apoplexy.
(Effusion of blood or serum within the cranium.) | <p><i>Predisposing.</i>—Heridity corpulence, senile decay, valvular disease, Bright's disease.</p> <p><i>Exciting.</i>—Pressure on brain, abuse of eating, drinking or narcotics; cerebral congestion, cold bathing after interperate eating, mental overstrain, extreme muscular efforts, suppression of menses.</p> | <p>Pupils dilated (in danger contracted), eyes staring, flushed, distorted face, teeth closed, slow, full pulse, incoherent speech, stertorous breathing (usually), epistaxis, partial paralysis of face, body, palate or sphincters; high temperature, <i>may</i> smell of liquor.</p> | <p>Horizontal posture, with head raised; cold to head, hot bottles to feet, sinapisms to legs; turpentine enema; leeches to anus, temples or nostrils; dry cupping to nuchæ; croton oil (℥ ij in mucilage), calomel, tincture of aconite, or of veratrum (℥ v.), or ergotine (gr. $\frac{1}{4}$) subcutaneously; bleeding (when the pulse is bounding).</p> |
| Asphyxia.
(Suspended animation from imperfect aeration in the lungs.) | <p>Sewer-air, choke-damp, or other noxious gases; drowning, hanging, lightning, obstructions in air-passages, chloroform poisoning, mechanical pressure on chest or spine, pulmonary collapse, tetanus, embolism, pleuritic effusion, extreme cold.</p> <p>In children, spasm and edema of glottis, diphtheria.</p> | <p>Pupils dilated, eyes projecting and injected, faintness, vertigo, lividity of face, cyanosis of lips, frothy mucus, clammy skin, gasping or imperceptible respiration, loss of motion and sensation, flickering pulse, clenched hands, cold extending upwards, low temperature.</p> | <p>Horizontal position, with head raised (except in embolism); cold affusion, frictions upwards, rhythmic pressure over abdomen, artificial respiration, sinapisms over heart and ankles; ammonia and whiskey subcutaneously; galvanism, removal of obstructions from air passages, inverted suspension, especially in chloroform-poisoning, tracheotomy, etc.; bleeding, transfusion.</p> <p>In asphyxia of new-born, slapping with wet cloths, hot and ice-cold water, alternately; artificial respiration, galvanism, catheterization of trachea, laryngo-tracheotomy; non-interference with cord until pulsation has ceased.</p> |
| Collapse.
(Sudden shock to general nervous system.) | <p>General injuries, gunshot wounds, burns, rupture of internal organs, hemorrhage, mental emotion, excessive cold, extensive urinary extravasation.</p> | <p>Pupils dilated, features shrunken, pallor, clammy skin, impaired vision, sighing respiration, feeble pulse, hiccough, nausea, vomiting, rigors, convulsions, partial or complete loss of consciousness, sphincters relaxed, low temperature.</p> | <p>Horizontal posture, with head rather low; hot bottles to feet and legs, warmth to epigastrium; frictions, nitro-glycerine (gr. $\frac{1}{100}$), ammonia to nostrils; beef tea and brandy; galvanism; ether (3 j) or quinine (gr. vj), or morphia and atropia (q. s.) or tincture of digitalis (℥ xij) subcutaneously.</p> |
| Compression.
(Cerebral irritation, with or without external pressure.) | <p>Pressure on brain by fractured bone, bullet, blood, tumor, pus or serum, resulting from falls, blows, gunshot or other injuries, causing intra-cranial inflammation.</p> | <p>One or both pupils contracted at first, then much dilated. Eyes staring and insentive, flaccid limbs, complete insensibility, stertorous breathing, full, slow pulse, hot, moist skin, sphincters relaxed, paralysis of side of face or body, blood or serum from nose, ears or mouth, indicating injury to base of skull.</p> | <p>Horizontal posture, with head raised; ice to shaved head, turpentine enema, croton oil (℥ ij) in mucilage, catheterization, trephining, aspiration or perforation if abscess is diagnosed; removal of tumors or other pressure.</p> <p>In children, avoidance of operation if no brain symptoms present.</p> |

| CAUSES. | SYMPTOMS. | TREATMENT. |
|--|--|---|
| <p><i>Predisposing.</i> — Albuminuria ; diabetes.</p> <p><i>Exciting.</i> — Apoplexy, epilepsy, hysteria, paralysis, uremia, typhus fever, jaundice, injury or diseases of the brain or skull, retrocedent erysipelas, opium, alcohol or prussic acid poisoning ; embolism or thrombosis, noxious inhalations, chloroform. In children, scarlet fever.</p> | <p>Pupils dilated (except in extreme danger or in opium poisoning), stupor, loss of motion, sensation and perception ; flaccidity of limbs, decubitus, more or less general paralysis, sphincters relaxed.</p> | <p>Horizontal posture, with head raised ; cold affusion, sinapisms, stimulant enema, stomach pump (if poison suspected), artificial respiration, galvanism, warmth to extremities, catheterization, flying blisters, bleeding ; croton oil (m. ij).</p> <p>In suspected subcranial hemorrhage, with paralysis of one side, exploratory operation on opposite side of cranium.</p> <p>In opium poisoning, strong coffee, flagellation, artificial respiration.</p> |
| <p>Concussion.</p> <p>(Sudden succussion of brain or spinal cord, interfering with their circulation.)</p> <p>Blows or falls on the head, jars of the spine by railway or other injuries, or falls on the buttocks or back.</p> | <p>Pupils dilated (when there is no compression), pallor, coldness and numbness of surface, feeble pulse, shallow respiration, deafness, loss of motion, vomiting, partial unconsciousness, rigors, epileptiform seizures, sphincters relaxed, low temperature. Symptoms immediately follow the accident.</p> <p>In concussion of the spine, hiccough (if phrenic nerve is irritated), dyspnea (if vagus nerve is irritated), vomiting, paralysis of sphincters, and perhaps of one or both arms, or paraplegia.</p> | <p>Horizontal posture, with head raised ; hot blankets, and hot bottles to feet, legs and sides ; frictions, blisters to nuchæ, ice to head, bleeding, mercury, beef tea and brandy enema, enema of sal volatile in solution.</p> <p>In protracted cases, setons to nuchæ.</p> <p>In concussion of spine, prone position ; counter irritation ; ice, or dry cupping over spine ; chloral bromide of potassium.</p> |
| <p>Epilepsy.</p> <p>(Nervous disturbance either centric or eccentric.)</p> | <p>Pupils dilated and oscillating, eyes rolling, conjunctiva insensible, face distorted, sudden unconsciousness, head turned aside, bitten tongue, frothy mucus, sinking at epigastrium, subjective sensations in limbs, clenched hands, violent muscular jerking, bounding pulse, vomiting, sharp outcry, profuse perspiration, cold extremities.</p> <p>In mild attacks only transient bewilderment.</p> <p>In children attacks occur mostly at night.</p> | <p>Horizontal posture, with head raised : gag between teeth, sinapisms to nuchæ and calves of legs, removal of spicula or pressing bone by trephine, pressure over carotids, nitrate of amyl inhalations, nitro-glycerin, antipyrin, bromides, puncture of cerebral abscess.</p> <p>In children's convulsion, hot baths, cold to head, spinal ice-bag ; bromide of ammonium (about gr. iij every ten minutes).</p> |

| CAUSES. | SYMPTOMS. | TREATMENT. |
|---|---|---|
| Hysteria.
(Perversion of nervous functions.) | Cerebral irritation from extreme emotion, sexual derangements, change of life, concussion of spine, puberty, suppressed emotions, mal-position of the uterus, digestive disturbance. | Horizontal posture, cold affusion, abdominal pressure, compression of ovaries; nitrite of amyl or chloroform inhalations, tincture of musk or valerian. |
| Inebriation.
(Poisoning of nervous centres by alcohol.) | <i>Predisposing.</i> —Heredity.
<i>Exciting.</i> —Abuse of liquors, alcohol or its substitutes (fusel oil, etc.) in adulterated liquors. | Horizontal posture, with head raised; cold affusion, zinc or mustard enemics, stomach pump, turpentine or salt and water enema, strong coffee, vinegar, solution of acetate of ammonia, pilocarpine (gr. $\frac{3}{8}$), or strychnia (gr. $\frac{1}{30}$), or caffeine (gr. ii), subcutaneously. |
| Syncope.
(Deficiency of blood to brain from heart failure.) | Exhaustion, hunger, hemorrhage, fear, extreme heat or pain, surgical operations, heart disease. | Horizontal posture, with head low; cold affusion, stimulating enemas, frictions, ammonia to nostrils, snuffs, snapisms, turpentine stupes over heart, nitro-glycerin (gr. $\frac{1}{100}$), galvanism, tincture of sumbul (η v.), or hydrobromate of quinine (gr. iv in hot water), subcutaneously; artificial respiration. In extreme cases, transfusion. |
| Sunstroke.
(Nervous exhaustion from hyperpyrexia.) | Direct solar heat, diffused heat combined with fatigue, hunger or intemperance. | Horizontal posture, with head raised; cold affusion (except when skin is cold), ice to head, spine or in rectum; cold drinks, cold baths, turpentine enema, dry cupping or blisters to nucha, chloroform, bromide of ammonium enema (gr. xx), antipyrin (sc. i), or quinine (gr. vj), subcutaneously; nitro-glycerin (gr. $\frac{1}{100}$) every ten minutes; digitalis. |
| Uremia.
(Blood-poisoning by constituents of urine.) | Accumulation of urea, ammonia or other nitrogenized debris in the blood from renal disease or derangement; scarlatinal albuminuria, obstruction of uterus, impacted stone, impassable stricture, extravasation of urine, suppression. | Horizontal posture, with head raised; cold to head, sinapisms to loins, vapor baths, diaphoretics and purgatives, hot blankets, bleeding. catheterization, chloroform, jaborandi, nitro-glycerine, strophanthus, elaterium, oxygen inhalations, poultices of digitalis leaves to abdomen, transfusion. |

DIGESTIVE TRACT.

A Glycerine Suppository.

FROM the foreign correspondence of the *Medical and Surgical Reporter*, we extract the following :

The history of the at present fashionable employment of glycerine as a laxative is rather interesting. Dr. OIDTMANN, a physician of Maastricht, Holland, who cared less for the Dutch code of ethics than for the almighty dollar, did for years a flourishing business by advertising his infallible and instantaneously acting purgative. As he did not appear to get rich fast enough the German government came to his assistance by forbidding its sale as a secret remedy, and publishing at the same time an analysis of it. The natural result of this proceeding was a tremendous demand for Dr. Oidtmann's purgative on the part of all who were troubled with constipation. The analysis having proved that its essential constituent was simply glycerine, the profession itself soon took hold of this drug in the treatment of constipation. The fact is that glycerine applied to the rectum, in slight cases of constipation, acts really as a prompt, though scarcely as an energetic laxative. The question why glycerine exerts a laxative influence has been answered variously, though it cannot be said that its *modus operandi* has as yet been definitely established. Some regard its action as a reflex phenomenon due to the local irritation of the drug ; others believe that glycerine acts like an alcohol, causing (like ethylic alcohol, for example) a rapid abstraction of water from the part, which in turn causes increased peristaltic movements of the bowels. It has been suggested that a similar process—on a grand scale—takes place in cholera, where the rapid desiccation

of the mucous membrane of the bowels leads to muscular cramps.

The application of glycerine by the mouth and by the rectum by means of a syringe was soon superseded by suppositories prepared from glycerine and oil of cacao, which again were replaced by hollow suppositories, filled with glycerine. But the greatest improvement was reached by the introduction of glycerine toilet soap as the most perfect and most convenient laxative suppository. The soap, being very plastic, the patient can make suppositories from it at any time without any preparation whatever. The action of the glycerine soap suppository is very prompt, a few minutes sufficing to produce a gentle movement of the bowels. It must be admitted that for ease and convenience of application, for economy and prompt action, this new form of glycerine suppository is an ideal laxative which, especially for women and children, cannot fail to become popular soon.

Iodoform in Chronic Rectitis.

CHRONIC rectitis, associated as it ordinarily is with ulceration of the mucous tissue, is an extremely annoying disease to the practitioner, and a distressing and dangerous one to the patient. Not only an impairment of the general health follows it, but a constant menace from hepatic complication must be recognized. The physician's attitude toward his patient is, at the same time, often rendered a sorely trying one, by the refusal or hesitancy of the patient to submit to such means as are ordinarily deemed essential to a cure. The use of the rectal speculum, the dilatation of the sphincter anus, etc., is often confronted with great aversion, and in deference to this feeling physicians often reluctantly yield and adopt other plans. It was with

this feeling and with the view of preventing septic disturbances of the liver that we first ordered suppositories of iodoform inserted into the rectum.

The condition was one following a violent and protracted dysentery in a delicate female, æt. 17, whose prejudices against what we deemed the proper treatment could not be overcome. The discharges from the rectum had contained pus and blood for three or four months previous to the adoption of iodoform treatment; the actions exceedingly frequent and the sphincter so weakened as to not always successfully perform its functions. A considerable inflammatory action in the integuments around the anus was complained of, and the peculiarly distressing pain in this region also evidenced the existence of a fissure. After repeated efforts to secure an examination without success, we ordered suppositories of cocoa butter, each containing five grains of iodoform. At first they were not long retained, and one was used after each action. When subsequently they were retained, one was used in the morning, at noon and at bedtime. During the third week of treatment one suppository was used in the morning and one at bedtime, and for the fourth week one was inserted on going to bed each night, although no evidences of disease remained. The improvement was gradual, but from the first insertion perceptible to the patient.

Since the above experience we have treated three similar cases with like success. One of these had had the ulceration exposed and cauterized with nitrate of silver. The others were not examined with the speculum, but had had chronic dysenteric conditions of the rectum for some time. No medicine was used internally in either case. —*Memphis Medical Monthly.*

DISEASES OF RESPIRATORY ORGANS.

Disinfection of Sputa.

IN a lecture on disinfection by DUJARDIN-BEAUMETZ (*Therapeutic Gazette*) are a few valuable hints on the disinfection of sputa. Patients must expectorate in spittoons furnished with saw dust which may be kept moist with any one of the following mixtures recommended by Valin, although the destructive action of these antiseptic preparations on the bacilli of tuberculosis is not equal:

1. Chloride of zinc (liquid at 45° C.) 3.2 oz.; glycerin and water, 1 qt.
2. Chloride of lime, 1.6 oz.; water, 1 qt.
3. Crystallized carbolic acid, 77 gr.; water, 1 pint 14 oz.; glycerin, 3 oz. 3 drams.
4. Crystallized thymic acid, 30 grs.; alcohol, 1 oz. 5 drams; water, 1 pint 14 oz.; glycerin, 1 oz. 5 drams; crystallized sulphate of copper, 1.6 oz.
5. Nitric acid, 1.6 oz.; water, 1 pint 12 oz.; glycerin, 1 oz. 5 drams.

At the end of the day the contents of the spittoon should be thrown in the fire.—*St. Louis Med. & Surg. Journal.*

Laryngeal Phthisis.

IN the treatment of the laryngeal complications of phthisis, Professor DA COSTA advises the insufflation of iodoform or application of cocaine.—*Ibid.*

Phthisis Pulmonalis.

FOR the irritative fever of phthisis pulmonalis, when treatment is absolutely necessary, Professor DA COSTA recommends: R. Antipyrin, gr. ij; quininæ sulph., gr. j. M. ft. j. in capsul. Sig.—One every few hours.—*Ibid.*

Cough.

A MIXTURE for troublesome cough of a violent paroxysmal nature, often

met with after influenza, is given by Dr. H. O'B. DECK, in *Therapeutic Gazette*:

℞. Cocain. muriat., gr. ij; morphinæ sulph., gr. iss; extract. glycyrrhiz. liquid.; glycerini, āā ℥ xx; aquæ, q. s. ad f ʒ iv. M. Sig.—One dessertspoonful every two hours, till the cough is relieved; then less frequently. To be swallowed slowly.—*Coll. & Clin. Record.*

DISEASES OF CIRCULATORY ORGANS.

Purulent Pericarditis Successfully Treated by Aspiration and Drainage.

AT a meeting of the Clinical Society of London, Dr. DICKINSON related the history of a boy, aged ten, who manifested symptoms of pyæmia following a gluteal abscess. On admission to the hospital there was evidence of effusion into the left pleura and the pericardium. There was much dyspnœa, blueness and irregularity of pulse. There was œdema more or less general, but especially marked about the thorax. The liver was enlarged or depressed so as to reach the umbilicus.

The pleura was aspirated on four different occasions, with but slight amelioration of symptoms. Fifteen days after admission the pericardium was aspirated, one ounce of creamy pus being withdrawn; the operation was repeated eight days after, when twelve ounces, and seven days after this, when nineteen ounces were withdrawn. The place selected for puncture was on the right side, close to the edge of the sternum, in the fifth interspace. The heart, previous to each operation, had been drawn to the left by a preceding aspiration of the pleura. One week after the last aspiration the pericardial sac had again filled up, when an incision was made in the spot of previous puncture, and a drainage tube inserted. Recovery was complete.

Mr. Parker, at the same meeting,

reported a case of the same disease, which he had freely incised. Death had occurred while irrigating the pericardial cavity in order to wash out the thick membraniform pus with which it was distended. Aspiration had been previously done, with but temporary relief. He advises the fourth left intercostal space, close to the sternum, as the most appropriate place for incision, as it would longest afford a direct communication with a gradually retracting pericardium.

Dr. S. West remarked that Dr. Dickinson's case was only the third case on record where recovery had ensued. The first case was published by Rosenstein, in 1881; the second (the speaker's own), published in 1883 or 1884. Dr. Barlow, alluding to the question as to the best position to perform aspiration, quoted two cases that had died unrelieved, in which he had made the autopsies. All the experimental punctures made to the left of the sternum went into the heart wall, and he was unable to withdraw any fluid by the aspirator, and was only successful when he introduced the needle to the right of the sternum, and he considered that the right sided puncture had been unnecessarily discarded.—*Medical and Surgical Reporter.*

Slight Aortic Insufficiency.

SOME instructive experiments on artificially induced aortic murmurs were published some months ago by Dr. TIMOFEJEV (*Berlin klin. Wochenschrift*, 1888), in which he showed that a very slight aortic insufficiency may exist without producing a diastolic murmur, but that in such cases a distinct accentuation of the second sound can then be heard; he also found that with greater but still slight insufficiency, though a murmur is produced, this can be made to cease by diminution of the blood

pressure, either by venesection or by section of the spinal cord.

These experimental observations are in full accord with the well known clinical fact that an aortic bruit is sometimes temporarily much less pronounced than usual, and may even occasionally disappear.

An interesting paper has just been published by Professor Carl Dehio, of Dorpat, in which he gives the details of a case which illustrates this variability of some aortic bruits very well. The patient was a student who had suffered from syphilis. At times he experienced severe pain in the region of the heart, accompanied by dyspnœa, headache, giddiness, and faintness. He had consulted several physicians, some of whom had detected a murmur, while others had declared there was none. Professor Dehio found at first, while the patient was sitting, merely some accentuation of the second sound, but as soon as he stood up, a blowing murmur was audible over the whole of the body of the sternum synchronous with the second sound, and prolonged to the end of the diastole. After a time, this became less and less perceptible, and finally vanished, but, on the patient moving or working his arms about, it reappeared.

Tracings taken with a Dudgeon's sphygmograph showed that while the patient was in a recumbent posture, there being no murmur, the pulse, which was beating 80 per minute, was of a normal but weak character, with a slight distension wave and a low blood pressure, the secondary waves being only just perceptible. On standing up, the beats increased to 88 per minute, the bruit becoming then audible, the tracing assumed the character frequently observed in cases of neurotic cardiac palpitation, the pulse wave being higher, but falling rapidly, and the secondary

and tertiary waves being well marked. After considerable exertion, when the bruit was louder still, the beats being, however, only 76 per minute, the distension wave was three times as high as when the patient was lying down, and it fell very quickly, being in fact the typical *pulsus celer*. It is seen that the bruit was dependent on the initial blood pressure due to the force of the contraction of the left ventricle, rather than on the mean intra-arterial pressure, which was probably not increased, since, according to the researches of Riegel and of Wetzel, there is no increase in the mean pressure, where the secondary waves become more pronounced.

It is evident from the tracings that whenever the primary wave increased, the secondary waves increased also; and thus that, while when the patient was in a recumbent posture, there was but a gentle backward stream through the defective valves, yet, upon a slight amount of exertion, the velocity of this stream was greatly increased, and thus became capable of producing a murmur.

This difference between a gentle and a rapid stream can be easily illustrated by compressing an india-rubber tube through which water from a cistern is flowing, when the murmur, which can both be heard and felt, is readily found to depend on the velocity of the water. Dr. Dehio remarks that he cannot well have mistaken a murmur of hæmic origin for a slight aortic insufficiency in this case, for the whole history, the dilatation of the heart, the occasional whistling character of the murmur, and the serious subjective sensations of pain and palpitation all point to organic mischief. Again, the insufficiency must be of slight extent as the dilatation of the left ventricle was but moderate, as Duroziez's double bruit was not audible in the femoral arteries.—*Lancet*.

THE AMERICAN MEDICAL DIGEST.

PART II.

SURGERY.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

Treatment of Fracture of the Patella by a Subcutaneous Silk Ligature.

THE President of the New York Surgical Society showed two patients with recent fracture of the patella treated by subcutaneous silk ligature. During the preceding two months he had thus treated five patients with recent fracture, the two now presented being the first and third of the series. The second had been discharged cured; the fourth and fifth were still under treatment and doing well.

The method employed might be called a modification of the external silk ligature employed some years ago by Volkmann, and had been suggested and employed in the first two cases, under the speaker's supervision, by Dr. E. W. Clarke, house surgeon at the New York Hospital.

It consisted in passing a silk ligature through punctures made in the skin, through the tendon of the quadriceps femoris and the ligamentum patellæ and under the skin in front of the patella, in such a manner that by drawing the ligature tight the two fragments of bone were drawn together.

He employed a long half curved Hagedörn's needle and a stout braided silk ligature. The four punctures (through the skin and the sides of the tendons) were made close above and below the patella—at its four corners, so to speak. The needle was entered at the lower right-hand corner, carried through the ligamentum patellæ to the bone, then across and out through the opposite puncture. This made a loop through the lower tendon. Then the needle was entered beneath the skin at its recent point of exit and carried upward between the skin and the front of

the patella and brought out at the upper puncture on the same side. It then re-entered at this upper left-hand puncture through the tendon of the quadriceps, crossed beneath it, emerged at the opposite puncture, and thus made a loop through the upper tendon. The needle was then passed in at its fourth puncture (through the skin) and carried down under the skin and in front of the patella to emerge at the first puncture (where it had entered).

The two fragments of the patella were then pressed into close apposition, the silk cord was drawn tight and tied, and its ends were cut short. The entire suture being thus subcutaneous, the punctures through the skin were closed with a single suture passed through each. It was not necessary that the ligature should include the entire width of the tendon, but it was sufficient if it embraced just enough to give it a firm hold. It should also be passed close to the attachment of the tendon to the bone, in order that it might not become slack by cutting through the tendon toward the bone, under the strain. The silk-worm gut was apt to break at sharp turns. Catgut became absorbed too soon unless treated with chromic acid. The union obtained was not bony, but a close fibrous union; however, this had been shown to be true of the union of the patella in most instances where examination had been made after death, even when the fragments had been wired together. He had in a single instance produced bony union after uniting the fragments with catgut. He applied only a simple posterior splint. The stiffness of the knee which patients at first experienced he was convinced was due to the contraction of the internal and lateral ligaments of the joint, and soon disappeared when the use of the limb was resumed.

In one case ten days had elapsed after the accident before the operation was done; in the others only a few hours. In the first case the needle had broken and a transverse incision had been made to remove the broken end. Silk-worm gut had been used in this case for a ligature, and its manipulation had been faulty. Twelve days later the fragments had been found to be an inch apart, probably owing to kinks forming in the ligature when first introduced. The operation had been repeated, this time silk being used. Suppuration had followed, but the process had remained extra-articular. After a month the silk suture had been removed through the sinus, and the silk-worm gut suture two weeks later. Since then the openings had closed rapidly. The patient could flex the knee nearly to a right angle and no separation could be felt.

In the second patient the fracture had been close to the upper border of the patella, and the patient had been discharged well in about six weeks. In the third patient (presented) the fracture had occurred five weeks before; he was now able to flex the knee to a right angle, and no separation of the fragments could be recognized. The fourth patient had been under treatment three weeks; there had been no inflammatory reaction, and the fragments were not separated. In the fifth case only two days had elapsed since the operation.

The speaker thought the method was to be recommended, not only because of its own merits, but also because it was an efficient and apparently much less dangerous substitute for open arthrotomy and metallic suture—a method which, although almost entirely abandoned in Europe, was still having numerous victims in America. He knew of three cases, of which no report had been made, that had occurred during

the past summer in the hospitals of New York where, after that operation, the joint had suppurated, amputation had become necessary, and eventually the patients had died.

Dr. J. D. Bryant asked whether the method would be available where there was marked separation of the fragments with difficulty in making coaptation, or when there was an interposition of fibrous tissue, or when a firm blood clot filled the gap.

Dr. G. A. Peters suggested, in answer to Dr. Bryant's question, that four, six or eight separate loops could be passed and drawn together.—*N. Y. Med. Jour.*

Present Condition of the Treatment of Aneurisms.

DR. SCHECK of Danzig (*Therapeut. Monatshfte*) :

From a review of all clinical experiences up to this date, especially of his own experiences, the author draws the following conclusions with regard to a successful treatment of aortal aneurism.

The treatment of aortal aneurism in each case depends on : 1. The time of its diagnosis. 2. Its seat. 3. The complicative and consecutive disturbances of neighboring organs.

Diagnosicated soon after its incipency, the treatment of aneurism, when deep seated, requires in the first place : (a) Continued absolute rest, together with appropriate position, which usually is found out by the patient instinctively, but is frequently to be controlled by the physician in connection with subjective complaints and objective symptoms in each particular case. (b) Application of ice. (c) Limitation of diet in Taffnell's sense (maximum of alimentation : 120 grm. liquid, consisting of milk, egg, cocoa, and 150-180 grm. solid substance), especially limitation in the use of liquids.

In the second place are to be taken into account : (a) Eventually, subcutaneous injections of ergotine. (b) Internal use of iodine salts, with additions of opium until habituation.

In case the disease has been in existence for some time, a fact which may be calculated approximately from the volume of the aneurystic tumefaction, and in case the seat is a superficial one, the following therapeutic maxims are not only permitted, but commanded, besides those mentioned above : (a) Galvano-puncture. (b) Ligature, Brasdor-Wardrop system. The latter of especial use for affections of Art. anonyma.

In complications and subsequent phenomena, therapeutic treatment has to be shaped by the general symptomatic indications of the case in question.—*Int. Journal of Surgery.*

Transplantation of Mucous Grafts.

WOLFLER, of Gratz, restores the continuity of the mucous membranes, after excision of neoplasms or cicatrices, by transplanting to the denuded places strips of mucous membrane. These he at first took from the uterus or rectum of persons operated upon for a prolapse, or amputation of the cervix.

At present he is experimenting with mucous membranes transplanted from animals, such as the stomach, œsophageal, and vesical membranes from frogs, rabbits, and pigeons. These membranes were excised after the method advised by Thiersch for epidermal grafts, or simply separated from the muscular layer of the viscera. He finds that mucous membrane adheres quite as firmly as does epidermis, and the permanence of transplanted grafts was clearly demonstrated in a case of urethral stricture in which the continuity of the canal was determined at the autopsy six months after transplantation.

Three cases of urethral stricture are cited in which the grafts were taken from the prolapsed uterus. In these three instances, the urethral cicatrix was excised and the denuded surface covered with the mucous grafts after Thiersch's method. No sutures were required, but the surface was protected with a strip of protective smeared with cosmoline. After the lapse of twelve days, the granulation tissue was seen to have been replaced by a smooth, glistening layer of perfectly formed mucous membrane.

Equally successful results were obtained in blepharoplasty and rhinoplasty, the membrane having been obtained from an amputated cervix uteri and the prolapsed rectum of a child.

In a case of rhinoplasty of the cheek, the author obtained an excellent result by employing the mucous membrane from the œsophagus and stomach of a rabbit.

In the discussion of the paper, Thiersch took exception to a statement made by Wolfler, to the effect that transplanted tissue always assumes the characters of the structures into which it is engrafted, and quoted, in proof, the celebrated case of his own, in which hair continued to grow luxuriantly upon a flap of skin transplanted from the cheek to the soft palate.—*Berliner Klin. Woch.*

Surgery of the Abdominal Cavity.

DR. ZIELEWICH (*Berliner Klinische Wochenschrift*):

Laparotomy has ceased to be the bugbear to physician and patient that it once was ; still, the results of this admirable procedure are only too often unfavorable. Better results must be looked for, when experience shall have fully developed the technicalities close clinical observations must teach us. As laparotomies do not frequently fall to the share

of the country surgeon, it is essential that observers shall publish reports, which shall be of scientific value for these men. The author publishes five cases of laparatomies for the following causes: Intestinal invagination, empyema of the gall-bladder, echinococcus of the liver, diagnostic laparotomy in carcinoma of the pancreas, and chronic abscess in the abdominal cavity. The cases all ran a favorable course. The following rules to be observed in laparotomy were appended to the paper:

1. Disinfection of the patient prior to the operation by taking two warm baths and brushing the whole body with soap and carbolyzed water.

2. The laparotomy is to be performed in a room in which no suppurating wound shall be dressed or operated upon. The furniture of the room shall consist only of a bed, an operating table, a small iron stove, and in hospitals an instrument closet. The temperature shall be in the beginning of the operation from 14° to 15° R. The floors and walls must be scrubbed and irrigated with a 1-1000 solution of corrosive sublimate before operating.

3. The abdomen and genitals are well brushed with a warm 3 per cent. solution of carbolic acid and soap before the operation. The temperature of these parts is maintained during the operation by warm and moist compresses.

4. Sponges exclusively reserved for laparotomy are kept in a 3 per cent. solution of carbolic acid, and at the beginning of the operation are placed in a hot 3 per cent. solution of boracic acid.

5. The abdominal incision is made as small as possible and then enlarged according to necessity.

6. Unless one has to contend with septic fluids it is not necessary to the

particularly pedantic in the toilet of the abdominal cavity.

7. The flaps are brought together by three continuous sets of sutures, the deeper one taking in the peritoneum only, the middle the muscular tissues, the superficial the skin. In the deeper sets catgut or silk is to be used, in the superficial one silk only.

8. No matter what kind of a laparotomy is done, the dressing is the same. Iodoform is dusted directly on the wound and covered with iodoform gauze. Over this is placed a thick layer of sublimated gauze, and over the whole abdomen a layer of antiseptic wool or cotton. This dressing is retained by wide gauze bandages previously soaked in a 3 per cent. solution of carbolic acid. The bandages are to be carried over the hips, as this will prevent their slipping upward.

To Extract Teeth Painlessly.

HÉNOQUE and FRÉDET recommend ether in the form of spray in the neighborhood of the external auditory meatus. This acts on the branches of the trigeminal in the face, thus producing anæsthesia sufficient to extract teeth without pain. This method is easy and free from danger.—*Therap. Monatsh.*

General Principles Involved in Amputation.

DR. DENNIS, in *Journal American Medical Association*:

It is sometimes necessary to amputate as soon as consistent with safety. Now, what is to guide the surgeon in his decision of so important a question? In cases of compound comminuted fracture, with injury to the main artery of the limb and with great loss and destruction of tissue in the soft parts, the hemorrhage is often alarming, and amputation is called for imperatively as the only salvation for the

patient. What is the earliest moment a surgeon should operate? Never during profound shock, and the rule which must govern a surgeon is to employ all means to control hemorrhage and to bring about reaction from shock, and wait. If the patient has pallor and coldness of skin, weak and feeble pulse, sighing respiration, non-reacting pupils, traumatic delirium, internal injuries, no amputation is indicated. The earliest possible time an amputation can be performed, under great necessity from hemorrhage, is when reaction is beginning; but unless the patient is likely to become exsanguined by delay, the beginning of reaction is an unfavorable period of operation, and it is wise to defer it until reaction is fully established. Amputation should not be performed with a subnormal temperature, a cold skin, a feeble rapid pulse, or during traumatic delirium—especially in children. The condition, then, of the temperature, the skin, the character of the pulse and the mental state, are all important factors in the solution of this problem. I have seen an Esmarch elastic bandage applied above a lacerated wound, over sound tissue, and when the flaps were made a certain amount of sloughing followed from the compression. The wound itself is the proper place to apply firm compression, never above the seat of the wound. This point is one of practical importance, because the elastic bandage, as a means of controlling hemorrhage, has been misused; instead of applying the compression over the bleeding part, it has been carried above the bleeding part and over sound tissue. As a result, gangrene in the flaps may occur, with its accompanying septicemia.

The hygienic conditions are most important in affecting the mortality. Patients in the country do better than

those in the city, and the latter do better in private practice than in hospitals. Always secure for a patient abundance of fresh air and plenty of sunlight. Too much stress cannot be placed upon his hygienic surroundings. While the weather, age of patient, seat of amputation, the part of the bone sawn through, whether for injury or disease or deformity—above all and beyond all, the hygienic conditions stand out foremost; and if we exclude serious organic disease, nothing is so important as the sanitary arrangements. Sir James Y. Simpson showed that five times as many deaths occurred after amputations in large city hospitals as in private and country practice.

We will now discuss the indications for an amputation:

- Aneurism.
- Malignant disease.
- Perforating ulcer of foot.
- Uncontrollable hemorrhage (primary or secondary).
- The operation of expediency in deformity, in tumors and tetanus.
- A disease of the joint.
- The moist variety of gangrene.
- In certain compound fractures and dislocation.
- Old sloughing and varicose ulcers.
- Necrosis of bone.

These ten indications for amputations have thus been arranged in an acrostic, which will enable the student or surgeon to have at command the information.

Requisites of a Good Stump.

1. The bone must be amply covered.
2. The flaps must not be adherent to the bone nor exert pressure on traction upon the cicatrix.
3. The nerves must not be adherent to bone or cicatrix.
4. The nerves must be cut high enough so as not to be affected by pressure or by atmospheric changes.
5. The bone must be smooth and capable of bearing firm pressure upon it.

Characteristics of a Bad Stump.

1. Necrosis at end of bone.
- | | |
|---|---|
| { | Sequestrum from injury to bone in sawing, by rough use of saw, by suppuration in bone, by injury to periosteum, by sawing without irrigation to prevent the saw from acting as an actual cautery. |
|---|---|

- | | | |
|--------------------------|---|--|
| 2. Conical shaped stump. | { | Insufficient covering, spasmodic retraction of muscles, growth of bone. |
| 3. Neuralgia of stump. | | External pressure, local and constitutional causes, bulbous enlargement, adhesion to cicatrix. |

We may now direct attention to a careful study of the technique of the operation in its present perfected state. For the purposes of description of an amputation in general the following points are to be considered in an amputation of the leg:

1. Preparation of patient.
2. Provision against hemorrhage before operation.
3. Formation of a suitable flap.
4. Section of the bone.
5. Provision against hemorrhage during operation.
6. Treatment of wound.

The preparation of the patient consists in a careful study of the patient's history, and also the special preparation of the member to be removed. Before the operation the heart and lungs should be examined, the urine analyzed, the general habits of the patient inquired into with reference to intemperance, and opium habit, or previous disease, and other points of interest which influence the treatment after operation, as well as the mortality. In other words, the surgeon should study thoroughly the individual upon whom he is to operate, and make himself complete master of the situation. The local attention to the part consists in thorough ablution, shaving, and free irrigation with carbolic acid or bichloride of mercury solution.

There is no real inconsistency between antiseptic surgery, as now understood, and treating a wound openly. A careful study of the principles of antiseptic surgery shows that both methods are in accord with its pre-

cepts, only that in the open method the wound heals by secondary union, and still the wound is aseptic. In the open method the stump is irrigated every few hours with carbolic acid solution. Balsam of Peru is used to stimulate the granulations, and in ten days the granulating surfaces upon the flaps are approximated, and healing takes place between these two granulating, instead of between two fresh, surfaces. In epidemics of diphtheria I have found the open method preferable, because a healthy granulation surface is a barrier to the entrance of septic poison.

In conclusion, endeavor to obtain primary union in all amputations by using every detail requisite to success. When the conditions are unfavorable, aim at secondary union by open method

Anæsthetics.

DR. J. W. WHITE, in an address delivered before the graduating class of the University of Pennsylvania, and published in the *Medical and Surgical Reporter*, among other things, gives the following directions for administration of ether:

There is hardly a case in which ether cannot be given with safety, but there are certain classes of cases in which there is special danger. These are. 1. Very old people with emphysema, fatty heart, hypertrophy or valvular disease of the heart. 2. Persons with marked tendency to weak heart action or syncope. 3. Persons with extensive lung disease, or with lungs greatly tied down by old pleuritic adhesions. 4. Habitual drunkards. 5. Persons who as the result of alcohol, syphilis, gout, rheumatism, or old age have marked evidences of extensive atheromatous disease.

In the presence of any of these conditions ether should be given very

slowly; with a large admixture of atmospheric air, and with great attention to the pulse, complexion, and the movements of breathing. The following rules, many of them almost self-evident but all of them important, apply to the preparation of a patient, not only for etherization but for the administration of any anæsthetic.

1. The stomach should be empty. No hearty meal should have been taken for at least six or eight hours before the operation. It is a good rule to insist that all nourishment taken on that day shall be liquid or nearly so, and in many cases it is well to limit the patient to a glass of milk taken early in the morning. This precaution lessens the risk of solid morsels of food being drawn into the air passages during vomiting; makes vomiting less frequent and severe; and diminishes subsequent nausea. In addition, it may be said that the presence of any large quantity of food in the stomach may embarrass respiration by interfering with the action of the diaphragm.

2. Loosen all garments that could in any way impede the movements of respiration or those, such as tight collars or neckbands, which could obstruct the flow of blood through the great vessels of the neck.

3. Remove false teeth or plates from the mouth. Never neglect to inquire as to their presence, no matter what may be the apparent age of the patient.

4. Keep the room at a temperature of at least 68° F. or 70° F., or if the operation is to be a prolonged one, at 72°. Practically this is an excellent rule because patients often take cold by exposure during etherization. There is also an additional theoretical basis for it in the fact that when the blood and pulmonary tissues become saturated with ether, evaporation takes place from

the surface of these tissues, causing a rapid loss of heat. If the air inspired is warm this supplies the heat necessary to volatilize the ether; if the air is cool the heat of volatilization is taken from the surrounding tissues, quickly chilling them, producing violent contraction of the capillaries, prolonged stasis, engorgement of the right side of the heart, and asphyxia.

5. Have the room perfectly quiet. The preliminary stage of etherization is, as has been said, one of acute sensitiveness to external impressions, and may be greatly prolonged by noise, bustle or excitement in the room.

6. Always examine the heart and lungs, and if the operation is to be severe or prolonged, examine the urine previously.

7. See that no light or flame is near the ether, especially on a lower level.

8. Quietly tell the patient in advance what to expect. Explain the suffocative feeling, mention that it is of almost invariable occurrence and is of no importance; describe the proper method of breathing through both the mouth and nostrils; caution the patient against struggling and resisting. Do this quietly and gently, and it is astonishing how often it will secure such intelligent co-operation on the part of the patient as will make the etherization rapid and easy.

9. Have an assistant ready to render whatever aid may be required, and, if inexperienced, caution him against the use of unnecessary force.

10. Of the various apparatuses employed for the purpose but two need be considered. One of these, that devised by Dr. Allis, of this city, consists of a wire frame work, large enough to cover the lower part of the face and through which a strip of bandage has been passed to and fro so that numerous

folds are exposed to the wetting action of the anæsthetic. These large evaporating surfaces, the thorough admixture of air, and the economy of ether are the three most definite advantages of this excellent little apparatus. An ordinary towel if folded into a cone, an aperture being left at the apex large enough to insert a finger, answers every purpose in private practice and obviates the necessity for carrying the more cumbersome inhaler.

11. The etherizer should watch three things—the breathing, the complexion, the pulse. When the breathing is regular and full without snoring, there can be little if any danger; if it is shallow and interrupted, watchfulness should be redoubled and a plentiful admixture of air given with the ether. If it ceases, the anæsthetic should be instantly removed and the tongue drawn forward; if respiratory movements do not begin, artificial respiration should be employed. If the face is very pale and the skin cool, the head should be lowered; if the complexion is livid or purplish, the head should be raised slightly, a freer supply of air given and the tongue and lower jaw brought forward. In case of failure of the pulse the head should be rapidly lowered, the ether immediately withdrawn, and hypodermics of whiskey and digitalis administered. Occasionally in patients who have been etherized after having eaten heartily, a condition may be noticed which includes to all appearances several of these elements of danger, but which is precedent to the act of vomiting; the breathing becomes irregular and interrupted, the face cold and pallid, the pulse almost indistinguishable. In the vast majority of cases this is followed by an expulsion of the contents of the stomach and then by the disappearance of these alarming symptoms. It should not be

forgotten, however, that in exceptional cases death may occur during vomiting, possibly, as has been mentioned above, from the descending excitation of the pneumogastric arresting the heart's action in diastole. This affords an additional reason for forbidding the taking of food for some hours previous to the administration of an anæsthetic.

Surgical Treatment of Chronic Cervical Adenitis.

THE Lyons correspondent of the *Bulletin Médical*, says that M. PONCET has made a communication to the Academy of Medicine on the surgical treatment of chronic adenitis. He distinguishes two kinds. In the first the glands are superficial, although sub-aponeurotic, and extirpation can often be accomplished with the knife or the scissors. In the second the deep carotid or subclavian glands are affected, and the difficulties of extirpation are increased.

Surgical intervention may be divided into several steps. In the first the glands are exposed by incising the skin and soft parts. The incisions should be long, even measuring at times fifteen centimetres (nearly six inches). The second step comprises the extirpation or the destruction of the diseased glands. The use of the knife is simple and easy for superficial glands, but becomes dangerous in deep glands on account of the risk of wounding the vessels and nerves. The diseased gland must first be fixed with the left index finger and then punctured with the point of the knife. Through this opening a small curette is introduced and part of the diseased tissue removed; a larger curette is then inserted and the sub-capsular enucleation of the gland completed in a few seconds. The same operation is repeated for each gland,

and in this way as many as ten or fifteen may be removed at one sitting.

The third step consists in covering the whole wound with a layer of iodoform, inserting a drainage tube through the whole length of the wound, letting it just come out of the inferior angle, and in taking a number of stitches to insure immediate union.

He states that recovery is very rapid, occurring in from fifteen to twenty days, and that it is permanent, several patients having been seen completely cured two years after operation.

Antiseptic Dressing.

THE standard antiseptic dressing in Paris now is, according to *Practice*: Iodoform, gm. iiss; oil of eucalyptus, gm. xx; paraffine, gm. l.; vaseline, gm. l. M. It is usually applied to ulcers.

Further Inquiries Concerning the Origin of Suppuration and its Relation to Ptomaines, etc.

DR. SCHEUERLEIN (*Archiv. f. Klin. Chir.*):

It has been demonstrated by actual experiment that neither croton oil, turpentine, or other chemical irritant, possesses the power of setting up genuine suppuration, which is only brought about by the presence of micro-organisms. Their ultimate mode of action upon the tissues is not thoroughly comprehended, but is supposed to be only a chemical one.

Very few bacilli possess the power of performing voluntary movements, but by their enormous proliferation compress the tissues and plug the vessels. Experiments with ptomaines have hitherto only produced symptoms of general constitutional disturbance, but not localized pus formation.

S. commenced by exposing a half pound of chopped rabbit's flesh to a temperature of 25° C. for ten days,

occasionally shaking it, then straining it to separate the larger pieces, and boiling again to remove the albumen, and again filtered. It was then boiled down to ten cc. and again filtered, after which he obtained a clear brown liquid, intensely fetid, for the most part neutral. A cubic centimetre of this, injected under the skin of a rabbit, produced only general constitutional disturbances, with some rise of temperature. Absorption continued so rapidly that no local phenomena were perceptible. He then filled a small glass tube with this liquid, which on being exposed to the air continued to decompose, having previously exposed it for thirty minutes to Koch's disinfectant vapor bath, and introduced the tube under the skin of a rabbit, allowing the wound to heal over it. The tube was introduced into an incision at the sacro-iliac junction, and pushed, after closing the wound, as far away from the point of entrance as possible under the skin and fascia. The wound healed promptly where the experiment was carefully conducted. At the end of three weeks the tube was broken. On opening the skin over the tube, both ends of the tube having been broken off, the latter was found to be stopped with a yellowish white substance of the consistency of broth, four mm. in thickness; the rest of the contents were only slightly clouded. The substance spoken of was only found in the ends of the tubes. On microscopic examination of the last named, it was found to possess all the characteristics of pus (pus corpuscles suspended in a thin liquid). Bacteria could not be found, either on microscopical examination or after cultivation of a temperature of 36° C.

The process did not resemble natural suppuration, or possess its progressive character. Even after remaining eight

weeks no change occurred, showing the fundamental difference between fibrinous and suppurative inflammation. This suppurative exudation would only coagulate when treated with a solution of common salt. The micro-organisms most frequently found in suppuration are the staphylococcus aureus and albus. From various experimental investigations, S. has reached the conclusion that suppuration is not brought about by any one particular micro-organism, but by several different varieties.—*Brooklyn Medical Journal*.

A Heel Restored by Graftings.

DR. C. A. POWERS presented a patient who, some months before, had suffered a comminuted fracture of the os calcis in a railroad accident. The larger fragments had been wired together, and had healed by first intention. Many smaller fragments had been removed or else had sloughed away. A considerable amount of the surrounding soft tissues had been irreparably injured, and had been removed. It had become evident that the loss of substance would result in making the foot entirely unserviceable. By a series of small transplantations of skin, and finally, by a large graft being taken from the calf of the opposite leg, the gap in the heel had been filled in so as to restore both the shape and the usefulness of the foot to a large extent. A large, thin cicatrix had lined the bottom of the cavity, which adhered to the bone and had nearly ceased attempts at granulation. In former times such a foot would have been amputated at once. This cicatrix and all the weakly organized bordering parts had been cut away when the graft was made. To insure complete rest during the healing of the latter, the knee had been put across the other in a "figure-4" position; however, in order to accustom

the knee to remaining flexed in this position, it had been previously kept for some time in plaster-of-Paris.

Dr. W. T. Bull, being requested by the chairman to open the discussion, spoke in praise of the operation and its quite remarkable results. He advised that, whenever grafting was found to be necessary, it should be undertaken as early as possible, since every added week of confinement to bed lessened the general vitality of the tissues, and so the chances of success in any plastic operation. Absolute immobility of the limb was necessary, and the plaster-of-Paris splint beforehand, to get it accustomed to the desired position, was an excellent idea.

Dr. R. Abbe mentioned a case where both palms had been destroyed by fire and a broad cicatrix formed, being about all there was left over the bones. He had dissected off this cicatrix, and had prepared flaps in the thighs, under which he had then slid the hands. The patient having to keep bent forward in a single position, which before long became intolerably irksome, he had by giving her morphine, made it possible for her to endure it for two weeks till union took place.

VENEREAL DISEASES.

Anemone Pulsatilla in Gonorrheal Orchitis.

DR. MARTEL has employed anemone pulsatilla for some years in gonorrheal orchitis with success. In 1885 and 1886, he reported a series of cases which he had cured with this agent, in doses of thirty drops of the tincture in twenty-four hours. The drug has the advantage of mitigating the pains and enabling the patient to walk. Dr. Bazy has taken up the experiments lately in the Hôpital Midi, Paris, and communicates to the *Semaine Médicale*, an

account of forty-eight cases so treated. In thirty-five cases, recovery was complete; in ten, there was very marked improvement; in two recovery is uncertain; and in one case, the drug had no effect.

Bazy employs the drug in the following formula: *R.* Tinct. anem. pulsatillæ, gtt. xxx; syrupe, f 3 iv. *M.* Sig. Dessertspoonful every two hours.

The remedy is willingly taken and well borne by the patients. Treatment must be continued until complete recovery occurs. The average time required for cure is eleven days.—*Wiener Med. Presse.—Medical and Surgical Reporter.*

Pterygoid Plaques.

CERTAIN ulcerations of congenital syphilis, occurring upon the soft palate, have been designated pterygoid plaques. Dr. SEVESTRE in describing these, states that there are always two, symmetrically situated upon the vault of the palate behind and within the



Fig. 25. Pterygoid Plaques.

alveolar arch, at the point where the pterygoid apophyses form a projection (Fig. 25). The plaques are roundish or ovalish, rarely attaining the size of a centimetre in their long diameter. These are slightly elevated and yellowish white in color. Later there is a loss of substance and finally they become

deeper, brownish in color, and bleed easily. They remain stationary a certain length of time and finally heal.—*St. Louis Medical and Surgical Journal.*

Syphilitic Labial Fissures.

DR. SEVESTRE is publishing a series of interesting articles upon precocious congenital syphilides in the *Progrès Médical*, and among some of the lesions observed he mentions labial fissures. These are frequent and may be median, commissural, or dispersed. The median are

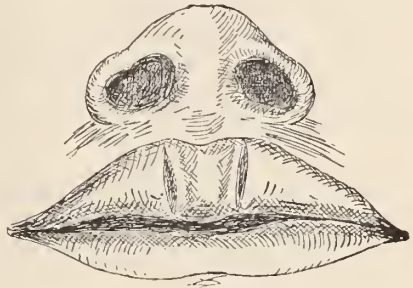


Fig. 26. Median Syphilitic Labial Fissures.

seated upon the upper lip to the right and the left of the middle lobe (Fig. 26). These are a pretty certain sign of syphilis. When occurring upon the lower lip the median fissure is single and is situated in the exact centre of the lip. Commissural fissures as their name implies occupy the commissures and are essentially mucous patches. Dispersed fissures occur upon the upper or lower lip, at several points, and their direction is from behind forwards. These are regarded as a positive sign of congenital syphilis of a severe form.—*Ibid.*

Abortive Treatment of Gonorrhea after Cocaine Anæsthesia.

A MEMBER of the Society of Medicine and Pharmacy of Isère, treats gonorrhea in the following way: He first washes out the urethra with a large amount of aseptic water, and then fills it with a ten per cent. cocaine solution.

After leaving this injection in for about five minutes it is allowed to escape, and what remains is washed out with more sterilized water.

The urethra now being anæsthetized, an aqueous solution of silver nitrate, of the strength of 1 to 25, is injected into the urethra as far as any inflammation is supposed to exist. In the writer's experience this application neither produces nor is followed by any pain.

The complete removal of the cocaine solution is necessary, because of the incompatibility between the silver solution and the hydrochlorate.

As the discharge lessens, a sulphate of zinc solution, 1 to 500, is generally indicated.—*Analectic.*

Mercurial Poisoning from Subcutaneous Injection of Calomel.

J. W. RUBEK (Deutsche Med. Wochenschrift):

Inasmuch as the subcutaneous injections of insoluble mercury salts has of late been much recommended and used, two cases reported by this author are of interest, showing the dangers from this method of treatment and the length of time that the insoluble salt remains in the place of injection, during which absorption into the general circulation takes place.

The first case was that of an anæmic woman, thirty-four years of age, affected with syphilis. The initial lesion was contracted in January. On the 12th of March she received a hypodermic injection of one and one-half grains of calomel, and the same amount on the 20th of March. On the 31st of March a slight stomatitis was present. April 13th the patient again received one and one-half grains of calomel hypodermatically. Fourteen days after she was received into the hospital, suffering from marked diarrhea and weakness. Examination

showed an extensive ulcerative stomatitis, *fetor exoris*, the stools very watery and evil smelling. Urine, sp. grav., 1013; no albumen. Her condition steadily grew worse, diarrhea continued, the stomatitis increased in extent, slight fever was present, and on May 6th the patient died. Autopsy showed nothing especial, except in the intestines, where the mucous membrane of the large intestines, especially on the tops of the folds, was found to be curved and infiltrated by a diphtheritic membrane, which in spots had been cast off, leaving behind deep ulcerations. Incision into the spot where the injection had been made released about two drams of a thick, grayish-white fluid resembling pus, the walls of the cavity containing it being discolored and formed of softened muscle-tissue. Examination of the fluid showed the presence of a large amount of mercury. The previous bad condition of the patient no doubt contributed to the fatal result, but the fact that three weeks after injection was made mercury was found at the site of injection, shows the difficulty of controlling or limiting the absorption of the drug when administered in this way.

The author quotes a second case of a well nourished man, thirty years of age, and affected with syphilis, who received two hypodermic injections of calomel, a week intervening between the two injections. On the second day after the second injection, profuse salivation and well marked stomatitis were present, with diarrhea, vomiting and anuria. The patient died six days after the last injection, and autopsy showed deep diphtheritic infiltration of the large intestine, giving rise to perforation at the sigmoid flexure, with peritonitis following; also acute parenchymatous nephritis and ulcerative stomatitis. A

number of other cases are quoted, some of them doubtful, illustrating the same point. All the cases except the second one given above occurred in anæmic patients, or in those weakened by disease, and the author considers that here, the subcutaneous injection of insoluble mercury salts is contra-indicated. He is inclined to attribute the rapid acute course which the second case ran to the possible direct injection of the medication into a vein.—*Analectic.*

For Syphilis.

HORATIO C. WOOD, in a recent article in the *Therapeutic Gazette*, says that the contraindication for the free use of mercurials in the treatment of syphilis is not the number of years since the primary affection, but a condition of low vitality and a tendency to necrotic changes. Under such circumstances, mercury, if employed at all, must be used with the greatest caution; if, however, the physician is not content to rely upon the iodides, but feels that mercury must be given, this mixture will do better than any other: \mathcal{R} . Hydrargyri chloridi corrosivi, gr. iss; tincturæ ferri chloridi, f 3 ij; glycerini, f 3 j; olei caryophylli, ℥ xvij; aquæ q. s. ad f 3 ij. Misce. Sig.: Teaspoonful after each meal.

The proportions may be varied to suit individual cases.—*St. Louis Medical & Surgical Journal.*

Abortive Treatment of Syphilis.

DR. J. W. WHITE (*Med. News*) concludes a study of this subject thus:

1. While it is unquestionably desirable to begin mercurial treatment at the earliest proper moment, and while that treatment undoubtedly either suppresses or renders milder the subsequent secondary manifestations, and while there is every reason to believe that in this

way the liability to later or tertiary lesions is somewhat lessened, nevertheless the sum total of these advantages does not warrant the employment of mercury one moment before the diagnosis of constitutional disease is absolutely assured.

2. While in many cases that diagnosis can be made with a high degree of probability from the appearance of the primary sore alone, yet it cannot be said that all possibility of error is excluded until some general symptom, such as the enlargement of distant lymphatic glands, has shown itself.

3. The administration of mercury during the existence of the primary sore, unaccompanied by general symptoms, for the purpose of suppressing or "aborting" syphilis, is not therefore, justifiable, unless by confrontation the diagnosis can be confirmed, or unless there are urgent and unquestionable reasons for securing rapid cicatrization of the chancre.

4. It is proper to employ cauterization or excision according to the site of the chancre, in cases in which it is seen very soon after its appearance, and especially when it is known to have followed intercourse with a syphilitic person. The chances of preventing constitutional infection in this way, while very slight, may yet be considered sufficient in such cases to counterbalance the disadvantages of the method, such as pain, swelling, the production of phimosi or of suppurating bubo, and the obscuring of the diagnosis by the resulting inflammatory exudation.

5. Aseptic or antiseptic measures, while harmless, cannot be considered especially indicated in the local treatment of chancre, and can, in all probability, have no true abortive influence.

6. The local use of mercurials, hypodermatically or by inunctions, is per-

haps worth a trial, but it is probably inferior to the more radical methods, based essentially upon the same principles—excision and cauterization.

DISEASES OF THE EYE AND EAR.

A New Method of Ophthalmoscopy.

ACCORDING to the Berlin correspondent of the *British Medical Journal*, Dr. BELLARMINOFF, of Moscow, recently demonstrated to the Berlin Medical Society a new method of ophthalmoscopy. The eye is first made insensible by cocaine; then a little plain glass is pressed against the cornea. Between the glass and cornea a very fine zone of fluid is instantly formed. Thus, glass, fluid and cornea being transformed into one refracting medium, the refracting power of the cornea is wholly eliminated. The eye is thus transformed into a highly hypermetropic one. By this method it is very easy to see the fundus of the eye, and four or five persons can examine the eye at the same time. The method is likely to be of great service for the instruction of students, but it is not probable that it will be of much use to practitioners. —*Therapeutic Gazette.*

Recurrent Fatty Cyst of the Orbit.

DR. J. H. BUCKNER (*Journal American Medical Association*):

J. O., a young girl, æt. 10 years, was brought to my office in the early part of May, 1878. A soft elastic tumor projected from the external canthus of her left eye, overlapping and pressing the globe inwards and upwards. The pupil was almost entirely covered by the upper lid on account of the displacement, and her vision in that organ was consequently reduced to a bare perception of large objects. Vision of R. E. normal.

The growth of the tumor had been

exceedingly slow, making but little progress for two or three years from the time it was first noticed by her, until a few months prior to her visit to my office, when it began to enlarge more rapidly. Her relatives belonged to the laboring class, and could not give a definite history as to the time of its first appearance; and, as its growth had been so slow after it had emerged from the orbit, it had probably started during early infancy, if it was not congenital.



As will be observed by the photographs, herewith submitted, Jessica was a well developed child for her age. The second photograph was taken about two months subsequent to the removal of the tumor, and shows that the displaced eyeball had regained its normal position.

Operation.—My little patient was anesthetized with chloroform, and I proceeded in the following manner to remove the tumor. The conjunctiva was slit vertically over the swelling, and, with probe-pointed scissors, separated from the external portion of the growth, the cyst wall was quite thin and was snipped at one or two points, but owing to the semi-solid character of the con-

tents, but little was evacuated. I then proceeded to separate the cyst from the globe and surrounding cellular tissue with the handle of a scalpel, and, with the probe-pointed scissors going deep into the orbit. My assistant rotated the ball inwards, until following the cyst wall, I could feel, with my little finger, the optic nerve, the wall of the cyst partly enveloping it, and being, apparently, a continuation of the external sheath of the nerve. With great care I divided the cyst wall with my scissors as closely as possible to the nerve.

The contents of the deeper portion of the cyst were much softer than the external part, and escaped when the cyst was divided; it was lardaceous in ap-



pearance and consistency. The orbital cavity was thoroughly cleansed by syringing with clear, cold water; no antiseptics being used. The edges of the mucous membrane were united with three or four interrupted silk sutures, and a compress wet with cold water, applied over the closed eyelids. The cold water dressing was continued for twenty-four hours, there was but little inflammatory reaction, and the wound healed by first intention.

The sac and its contents were sent for examination, to Dr. L. R. Longworth, who was at that time, about

eight months prior to his death, an ardent student of pathology and microscopy. He pronounced the contents of the cyst to be chiefly fat and epithelial scales.

The vision of Jessica, two months subsequent to the operation, was normal. After the second photograph was obtained, I did not see her until she came to my office in January, 1888. I found the left eye squinting inwards about four lines. Upon raising the upper lids a soft swelling was discovered, occupying the superior and external angle of the orbit. L. E. V.— $\frac{2}{30}$, R. E. V.— $\frac{2}{30}$. She had first noticed the return of the tumor during the summer of 1887. There was but little exophthalmos, however, the stiffness and immobility of the eye, and the comparatively rapid growth of the tumor, made her anxious to have it removed.

She was admitted to the Eye Ward of St. Mary's hospital on January 21, and on the 25th of the same month, assisted by Dr. Bertling, who administered the chloroform, I proceeded to dissect the cyst from the globe and surrounding cellular tissue; the cyst enveloped the ball for fully half of its circumference. She behaved badly under chloroform, and the thin cyst wall was clipped at several points, allowing its fluid contents (which were of the consistency and color of thick cream) to flow off. This also made the dissection difficult and tedious.

Deep in the orbit, the cyst was so closely adherent to the surrounding adipose tissue that much of the latter was also removed. The most thorough antiseptic precautions were taken in this operation; the instruments and sponges being cleansed with a solution of bichloride of mercury, 1 to 5,000; and after the removal of all the cystic membrane I could find, the cavity was

cleansed with the same antiseptic wash. The conjunctiva was united with two or three silk sutures, and a compress wet with the sublimate solution applied over the closed lids.

The operation was followed by intense inflammation of the cellular tissue of the orbit, of the conjunctiva and of the eyelids. Upon the third and fourth day the swelling of all the tissues surrounding the ball was so great as to prevent the possibility of inspecting the cornea, which I fully expected would slough as the result of the surrounding pressure.

On the second day ice compresses were tried, but finding the application of heat to give greater relief, the hot water dressing was substituted, and continued until the subsidence of the swelling. Four grain solutions of cocaine and atropine were frequently instilled into the conjunctival sac, and the inflamed tissues were irrigated with the antiseptic wash, as hot as it could be borne, every two hours.

There was but little discharge throughout, and on the sixth day the inflammation began to subside by resolution. The only damage to the cornea was a small ulcer near the centre, which soon healed. The ocular conjunctiva, externally and inferiorly, still remains red and thickened. The outward movement of the eye is yet limited, due, probably, to the stretching and weakening of the external rectus. The squint is reduced by measurement to one and a half lines, but she now has diplopia, which did not exist previous to the operation. Her vision remains the same, viz. $\frac{2}{30}$ for the left, and $\frac{2}{30}$ for the right eye, with D. 1 Sph. V. L. E. $\frac{2}{30}$. The diplopia is overcome by a prism of 10° , and will no doubt, be relieved when the exudation, resulting from the inflammation of the orbital cellular tissue, has been absorbed, and the external rectus

has regained its normal strength by exercise and contraction. Otherwise the advancement of the external, and tenotomy of the internal rectus may be necessary.

The cyst removed in this case was, of the class termed dermoid, the etiology of which is, in a great measure, a matter of speculation. The tendency to recur is a subject of more importance to us. The four cases reported by Dr. Fox, do not furnish the requisite data, on account of the shortness of time since the operation, to judge of the efficacy of his method of treatment with nitrate of silver. The same may be said of Thompson's case, treated by electrolysis. I doubt if either method, unless the entire cystic membrane could be reached by the caustic, or cautery, would certainly prevent a recurrence of the tumor. It would, evidently, have been hazardous to vision to have penetrated the orbit to the proximity of the optic nerve, with either of the mentioned caustics, which would have been requisite to success in the case I have just reported.

The analysis of the seventy-three cases, collected and reported by Berlin, quoted by Cornwall as an addendum to the report of his case, shows the important fact that orbital tumors of this class occur more frequently under 20 years of age, and that a large proportion of them are congenital. If we adopt the invagination theory we must regard all dermoid cysts as having the germ of development at birth.

I regard, as one of the most valuable points for oculists in connection with orbital cystic tumors, to be reliable data from which to estimate the frequency of recurrence under the different methods of treatment. This would be a fruitful field for the investigation of some of the ambitious and younger members of our specialty.

THE AMERICAN MEDICAL DIGEST.

PART III.

Diseases of Women and Children.
and Obstetrics.

DISEASES OF WOMEN.

Lacerated Cervix Uteri as Treated at the University Hospital by Professor William Goodell.

DR. LEWIS H. ADLER, JR. (*New York Medical Journal*) :

When this lesion exists, what are the symptoms? If it should be a rent which, owing to the position or extent, heals by immediate union, the only evidence of its possible existence will be that of bleeding, even when the womb is found to be firmly contracted and the perinæum uninjured. This sign is, of course, only presumptive proof of its presence, and not positively diagnostic.

When the tear is a deep one and fails to heal by primary union, the symptoms are on the third or fourth day—as described by Dr. Goodell—pain in the broad ligament which corresponds to the torn side of the cervix. If the rent is a double one, the inflammation, after subsiding upon one side, may take a fresh start on the other. This pain is often ushered in by a chill. The pulse is rapid and the temperature high. Pain may be absent and the inflammatory symptoms latent, yet the convalescence will be slow—unaccountably so unless firm pressure be made in each iliac fossa, when the woman will flinch.

The diagnosis of these cases to be positive must be made per vaginam. This is best done by placing the woman on her side and introducing a duck-bill speculum which is held in place by an assistant. Then, with a uterine tenaculum held in each hand, the fore lip of the cervix is first hooked and then the hind lip, by which means, if a rent exists, the two lips can be drawn forward and will come in contact, with a noticeable fissure between them, running across the neck of the womb.

In reference to a case left to nature, unattended by medical or surgical treat-

ment, one of two things happens: the rent heals or else remains ununited; in either event the process of involution is retarded; the inflammation which naturally ensues keeps the womb congested as well as causes an excessive lochial discharge, and these combined circumstances retard convalescence. If the wound unites, the woman's health will in time be established; but should no union occur, she will, as a rule, be more or less subject to a sense of weight in the pelvic regions, of back-ache, of a constant tired feeling, of loss of sexual desire, of pain during coition or of a show following it. The menses will usually be profuse and the intervals between them shorter. Likewise subinvolution of the womb or hypertrophic elongation of the cervix are apt to be developed as secondary lesions. Sterility is not an uncommon result. Miscarriages often follow it, and not infrequently epithelial cancer occurs. With regard to malignant disease, Dr. Goodell, whose experience in these cases has been very large, says that in the immense majority of cases of cancer of the cervix the trouble starts from a laceration of that portion of the womb.

Now, as to the treatment of these cases, which for convenience sake I shall divide into palliative and operative. The palliative measures are best subdivided into local as applied to the womb itself; and general, as directed to the patient's physical condition.

Under the head of general palliative treatment, comes rest, combined with a nutritious but easily digested diet, and supplemented with medicines of a tonic nature. A favorite prescription of Dr. Goodell's is one known in the house as lemonade iron, the formula of which is: \mathcal{R} . Strych. sulph. gr. ss.; tr. ferri chlor., f 3 iv; acid. phos. dil., f 3 vj; syr. limonis, q. s. ad f 5 vj. M. Dose, f 3 ij, t. d.

In nervous cases he is fond of the following: \mathcal{R} . Ammonia chloridi., 3 ij; ammonii bromidi, 3 iv; tinct. gentianæ comp., aq., $\overline{\text{aa}}$ f 3 iij. M. Dose, f 3 ij, t. d.

If anæmia is added to the nervous element of the case, a favorite pill, known as pil. sumbuli comp., is called for: \mathcal{R} . Ext. sumbuli, ferri sulph. exsic, $\overline{\text{aa}}$ gr. j; asafœtidæ gr. ij; acid arseniosi, gr. $\frac{1}{10}$. M. et ft. pil. No. j. Dose, one pill after meals, to be increased to six pills a day.

The local palliative treatment consists, first, in thorough cleanliness of the genitals. The vagina should be washed out at least twice daily with weak solutions of bichloride of mercury or of carbolic acid. Permanganate of potassium is also a useful drug. Profuse hemorrhage immediately after the accident is controlled with ice placed in contact with the cervix. Should it fail, vaginal injections of hot water, of tannin, or of alum may be tried, but none of the preparations of iron, since these interfere with immediate union of the parts.

The rent failing to heal by primary union, the treatment should be directed to relieving the local congestion and to protect as far as possible the exposed raw surface of the womb. This is best done by vaginal injections of water as hot as can be borne, by the puncture of the cysts which are formed from the stoppage up of the enlarged Nabothian glands, by painting the eroded surface about once a week with a saturated tincture of iodine, followed before it dries with a weak solution of silver nitrate, which Dr. Goodell says forms not only a protective but also an alterative crust of silver iodide, or by using a solution of a couple of drams of iodoform in an ounce of collodion, etc.

On account of the cicatricial tissue which the solid stick of lunar caustic causes, Dr. Goodell objects to its use

in this class of cases. Palliative measures failing to accomplish a cure, we have left but one resort—operation. By the use of the milder treatment we have prepared the patient for the more serious or operative procedure, and it is to this treatment that I now wish to direct attention.

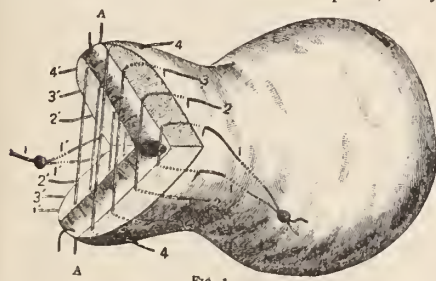
The patient is placed in Sims's posture, which allows the abdomen to sag down, and when the duck-bill speculum is introduced the air rushes in, expanding the vagina.

Before beginning the operation the cervix and surrounding parts are cleansed with a 1-to-2,000 solution of bichloride of mercury. The position of the internal os is now ascertained so as locate the site for the new cervical canal. Through the point a piece of strong thread is passed upon a needle, which latter is removed, leaving the cord *in situ*. (Fig. 1, A.) The ends of this are now tied, and by means of a tenaculum that portion between the two lips of the womb is caught and drawn forward. This doubles the loop into two small ones, each of which steadies one lip of the cervix.

The process of denudation is now begun; first, however, two straight, parallel incisions are made upon each lip, on either side of the thread, about a quarter of an inch apart and not very deep, in order to mark out the mucous membrane, which is to remain undenuded to serve as the lining for the future cervical canal; after which, to prevent blood from above obscuring what is being done, Dr. Goodell begins at the lower angle of the fissure and denudes up to the lower incisions. This is repeated above as far as the two upper cuts, care being taken to remove all of the cicatricial tissues. It is usually necessary to remove a wedge-shaped mass of this tissue at each angle of the

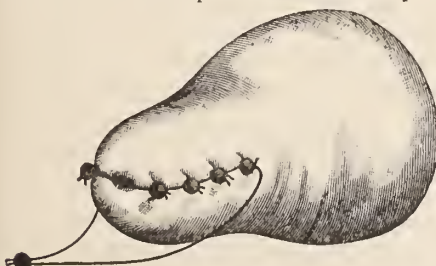
wound. Often in this operation small Nabothian glands will be seen filled with a gelatinous material. Whenever it is possible to do so, these should be dissected out.

The next thing is the introduction of the stitches. As those on the lowest side are the most difficult to pass, they



are inserted first. The wire used should be as fine as is compatible with safety, No. 31 being Dr. Goodell's favorite size.

The sutures being all passed (as shown in Fig. 1), the next thing to do is to secure them. Before doing this the wound is syringed with some antiseptic solution so as to be rid of all clots and foreign matter that may be present. The shot is then slipped down over a suture and clamped. The same pro-



cedure of syringing and shotting is repeated in placing the remaining sutures. When all are done in this manner, the womb presents the appearance as depicted in Fig. 2. Mention should be made of the fact that, to facilitate the removal of the stitches, Professor Goodell leaves the upper suture on each side several inches longer than the rest,

which are cut on a level with the shot. These long sutures have an additional shot clamped over their ends, to prevent injury to the mucous membrane of the vagina. When the time arrives for the removal of the sutures, all that is necessary is to introduce Dr. Goodell's bivalve speculum, and, by means of traction, on these two long wires, the cervix is readily brought well into view. The stitches are then easily removed, first on one side and then on the other. The operation is completed by again syringing out the vagina with a bichloride solution, sprinkling the cervix with iodoform, and packing the vagina loosely with gauze containing the same drug.

Displacements of the Uterus.

PROFESSOR PARVIN says : In posterior displacements of the uterus, replace the organ before introducing a pessary ; the frequent failure of its use is generally due to this cause.—*Coll. and Clin. Record.*

Shortening of Round Ligaments.

DR. DOLÉRIIS bears testimony to the efficacy of a method of performing Alexander's operation which has been practiced in this country (*Gazette des*



Fig. 28. A. Two segments of the right round ligament. B. Left round ligament.

Hôpitaux). It consists essentially in making two short inguinal incisions, exposing the round ligaments and then passing one under the integument and

suturing it to the other (Fig. 28). This method is particularly applicable in cases where the ligaments are long, and small in diameter. Dr. Doléris regards the operation as a most excellent one in cases of retroversion of the uterus.—*St. Louis Medical and Surgical Journal*.

Uterine Hemorrhage.

DR. W. L. TAYLOR (*University Medical Magazine*):

Any flow, either at or between the regular periods of menstruation, which exhausts the patient, can be considered a hemorrhage. At the occurrence of puberty and of the menopause, hemorrhage may occur, which only requires time for its relief. Hemorrhage is menstrual or intermenstrual—menorrhagia or metrorrhagia,—varying in extent from profuse menstruation to excessive flow from fungous endometritis, sarcoma, intrauterine fibroids or cancer; slight intermenstrual oozing may be due to pelvic congestion. The most fruitful cause of uterine hemorrhage, in the experience of the author, is the presence of fungoid granulation of the endometrium, and a few of these are capable of causing excessive hemorrhage. The dull curette will remove these with little danger of evil effects, if antiseptic measures are employed, and the sharp steel instrument may be used if the growths are difficult of removal. It is well to dilate the cervical canal with a steel dilator before using the curette, for the purpose of providing for its free passage and that of an applicator, and for subsequent drainage. An application of carbolyzed iodine should be made to the endometrium after the operation.

If the hemorrhage be due to sarcomatous degeneration of the endometrium, serious hemorrhage may result, but the condition may usually be recog-

nized by the fetid watery discharge, the cachexia, and the history. If not, the microscope will decide the character of the growths removed by the curette.

Any cause of hyperæmia of the uterus will cause hemorrhage,—displacements, laceration of the cervix, fibroid tumors in the uterine wall, and malignant disease of the cervix, Emmet's "congestive hypertrophy," in which the uterus feels puffy, the cervical canal is everted and filled with granulations, which resemble those of epithelioma, and the cervix is swollen and livid. In such cases scarification and astringent applications, with the use of the tampon or pessary, are necessary to relief. Curetting should always be done in case of enlarged uterus, when fibroid tumors are found, or no malignant disease is manifest. In the former case the operation will relieve temporarily, in the latter more serious measures will be necessary. Lacerated cervix must be repaired; displacements of the uterus must be corrected by the use of the tampon and the pessary; the cause of the congestion of endometritis must be removed, if possible.

Galvanism has not given good results in the author's experience; the curette has accomplished what was required in a much more rapid and satisfactory manner.

As to internal medication, ergot has given the best results, given in from one-half to one dram of the fluid extract three times a day; next in order, oil of crigeron, in capsules of five minims each, every three or four hours; digitalis nearly to its toxic effect, aromatic sulphuric acid, gallic acid, turpentine and tincture of cinnamon are also of value. The bromides are combined with these in cases of marked uterine and ovarian congestion.

Examination should be made early in cases of hemorrhage, without waiting for the cessation of the flow; remove constipation, portal congestion, mental causes, if it is possible; and do not meddle, above all, with an inflamed uterus, or maltreat into a state of inflammation one which is sympathetically in trouble.—*Analectic*.

Wylie on Pessaries.

WE extract the following from a letter published in the *Medical and Surgical Reporter*:

Dr. WYLIE, Professor of Gynecology, in the New York Polyclinic, gave a lecture and clinic on displacements of the uterus on February 14. He considers anterior displacements of little importance; it is usually only in posterior malpositions that treatment is called for. This treatment, in his opinion, should never be by pessaries. In his hospital, for the past several years, he has known only one to be used. They simply support the uterus without reaching the cause of the displacement. Furthermore, they are dangerous, because of their liability to infect the patient. They abrade the mucous lining of the vagina and, opening up the canal, allow free entrance of the air to the abrasion. He has often found women wearing the instruments for months and years without relief, whereas they have been quickly cured by curetting and the use of boroglyceride tampons. The tampons are a favorite method of treatment of many diseased conditions of the vagina and uterus with Professor Wylie, and he uses them continually to support the uterus in displacements. The tampons are made by cutting sheet borated cotton into strips, an inch and a half or two inches wide, rolling them up, with medium firmness, until they are of a desired diameter,

preferably about half an inch or a little more. They are then wet with the following: \mathcal{R} . Boroglyceride, $f \frac{5}{8} j$; glycerine, $f \frac{3}{4} xiv$. Mix and add a saturated solution of alum, containing $3 ss-j$ of the salt.

Professor Wylie also thinks Alexander's operation of shortening the round ligaments rarely necessary, for, if the cause of the displacement is treated, the malposition can, in most cases, be cured.

Salicylic Acid in Metrorrhagias.

Dr. ALEXANDRA V. SAMOILOVITCH, lady physician to the Tiflis Lying-in Hospital, states (*Transcaucasian Lying-in Hospital's Reports*) that she recently resorted to Dr. Alessandra Felici's method, in six cases of obstinate flooding of an obscure causation, where all the usual hæmostatics (ergot, hydrastis, henbane, tinct. capsici annui, hot douches, styptic irrigations, plugging, etc.) had utterly failed. Felici's method consists in inserting into the cervical canal a plug soaked in an alcoholic solution of salicylic acid (1.0 gramme of the acid in q. sat. of spirit, vini rectificat). In five out of six cases reported, the plug was left in situ for 1, 2, 3, 4, 5 hours. In the sixth, no plug was employed, but the cervix was simply painted with the salicylic solution. In all but one, hemorrhage ceased immediately, and did not recur. In the remaining case neither the plugging (twice, for four hours each time) nor the painting could arrest bleeding. In none of the patients did the application of salicylic acid give rise to any pain or discomfort, although in all the cervical mucous membrane, on its coming in contact with the solution, became at once white and sodden, while in some more or less prolonged plugging brought about the formation of a white superficial scurf, or rather caused the separa-

tion of a superficial layer of mucous membrane. The acid, therefore, seemed to act in a lightly caustic manner. Following her colleague's suggestion, another lady doctor of Tiflis, Miss Iadiga V. Karpovitch, tried painting with the solution, in three cases of metrorrhagia, of an unknown origin. In two, cure followed, while in the third case the procedure gave rise only to intense burning and pain.—*St. Louis Med. and Surg. Journal.*

Flushing the Peritoneum.

THE *British Medical Journal* calls attention in an editorial on this subject to a recent paper by M. Polaillon, who narrates two cases where he utilized this procedure with untoward results. In one case the patient died, and in the other the patient suffered from profound syncope.

The first case was one of suppurating oöphoritis on the left side and double salpingitis. Firm adhesions had to be broken down. The peritoneum was flushed with hot distilled water, and during the process profound syncope with suspension of respiration took place. After making a tracheotomy wound in the patient's neck, rapid amelioration of the symptoms occurred.

The second case was one where a large cyst had to be shelled out of the broad ligament. In order to flush out a considerable amount of effused blood, the operator employed distilled water delivered through a glass canula heated to about 99° F. This was followed by alarming symptoms on the part of the patient. The respiration became rapid, feeble, and finally ceased, and it was only with the utmost difficulty that the patient was finally saved. In regard to the amount of water used M. Polaillon states that he first poured in about half a gallon of hot carbolized water, and as it came out strongly tinged with blood,

more was used and accidentally at a higher temperature than at first. The pelvis being full, the water reached the upper part of the abdominal cavity. It was at this moment that respiration ceased. The operator believes that the stimulus of hot water touching the diaphragm or solar plexus caused, by reflex action, the arrest of respiration and syncope. He suggests in cases where flushing is necessary that the patient be raised up slightly so as to have the water gravitate below. The operation was done under the influence of chloroform.

[Was the death due, as M. Polaillon ingeniously suggests, to the effect of the hot water on the solar plexus or diaphragm; to the chloroform; to the carbolic acid; or the patient lost too much blood?]*—Brooklyn Med. Journal.*

Dysmenorrhœa.

DR. H. T. HANKS (*Albany Annals*), in a post graduate clinical lecture, says:

Case I. is a young woman suffering from dysmenorrhœa since her marriage only. The pain of which she complains is located in the left side of the abdomen, low down. It precedes the flow for two or three days. The patient complains also of a yellow discharge preceding and following the menstrual flow.

The physician who is now examining her finds retroversion of the uterus, the cervix pointing forward and upward, and the fundus backward and to the left side. There is great hyperæsthesia, no increase of temperature, but much induration and fixation upon the left side. The fundus can not be lifted more than one-half inch, and that not without severe pain. We have here, besides the displacement of the uterus, a peri-metritis peri-uterine inflammation, located upon the left side, and upon further examination by myself, I find the ovary and tube of the left side in-

volved in this inflammation, bound down, and holding the fundus firmly in this abnormal position. You will notice that I dip my sound first in vaseline and then in a fifty per cent. carbolic acid solution, making it absolutely aseptic before introducing it, and that the sound is used with the greatest gentleness while the patient is in the Sims position. As I pass the sound, you notice the patient's expression of pain. This extreme sensitiveness to the sound does not exist in the healthy uterus. You notice the exaggerated expression of pain when the sound passes the internal os, and again when the fundus is reached. We have here, then, quite positive evidence of an endo-cervicitis, an endo-metritis and a peri-metritis. The dysmenorrhœa, in this case, should be referred to these conditions together with a retro-lateral displacement of the uterus, which is held down by the exudation.

A dysmenorrhœa and excessive vaginal leucorrhœa, dating from marriage, point to possible latent gonorrhea in the husband. There has been in this case, probably, infection, and vaginitis, followed by invasion of the endometrium and left tube. There is, however, no distinct tumor in this case. It is not a case for removal of the tube. This patient has already been improved by treatment by my assistant, Dr. Thompson, and we shall go on with the present routine, which consists in painting the vaginal vault and posterior fornix upon the left side with iodine and packing it about with tampons of cotton saturated in a solution of boracic acid in glycerine, the whole being maintained in position by a dry tampon. Iodine will also be painted over the left ovarian region of the abdominal wall every fourth day, and a blister will be applied just before the flow, and the patient will re-

ceive the hot douche during the intervals between her tampons. She will be given a simple laxative, like the rhubarb and soda mixture or the Hunyadi water.

If you want these cases of endo-metritis and peri-metritis to do well, you must never allow them to become constipated and to strain at stool. Some one asks whether I shall use a pessary in this case. I answer, No. Pessaries should not be used when there is any sense of fixation. Pessaries can be applied only to cases in which the uterus is movable. In the course of two or three months, perhaps, if the displacement still exists, we may use a pessary in this case. Another asks whether I shall treat the endo-metritis with intra-uterine applications. I shall not. I seldom use intra-uterine applications in chronic endo-metritis, and seldom curette, unless I discover fungosities. You will find many eminent authorities advising this measure, however. Dr. Thomas Addis Emmet seldom makes intra-uterine applications, and at the Woman's Hospital our patients get well quite as rapidly as at other places. The tampon, the hot douche, and the iodine to the vaginal vault, the laxatives and tonics, so alter the circulation in parts as to cure in this way the inflammatory condition, and the dysmenorrhœa ceases when the cause is removed.

Case II. is that of an unmarried woman, 26 years of age, a domestic, well nourished. She is required to do a great deal of running up and down stairs. She first menstruated at 17 years. Her pains are in the back, both inguinal regions, and down the thighs and legs. These pains are so intense that she is obliged to go to bed. Menstruation occurs every eighteen days. Thus for five days out of every twenty-three she is incapacitated for work, a serious matter for a working girl. The degree

of her incapacity is shown by the fact that, although a poor girl, on a servant's wages, she has to come from a distance and is paying her board in the hospital, in the hope of relief. Her physician has been unable to find any pathological condition to account for the distress complained of.

The patient being fully etherized, I shall now proceed with a careful examination. I find no ovarian displacement in this case, no para-metritis nor peri-metritis, no fixation of the uterus. The trouble in this case is undoubtedly all in the uterus. I find this organ in position, but quite small, indurated, and ante flexed. I proposed to dilate the cervix and pass a curette over the endometrium, expecting to find some fungosities, and hoping to profoundly influence the uterine circulation.

I show you a set of hard rubber dilators. These answer very well for office use, where it is desired simply to enlarge the canal for application. To obtain the result desired in this case, more force will be required, and I shall use in preference, a two-bladed steel screw dilator. It is distinguished by the crenated, or scalloped, outside border of each blade and the decided strength of its parts. The first peculiarity effectually prevents the slipping of the instrument, and the second assures the equal dilatation of the internal and external os. Many of these instruments are so frail that the point bent under the pressure to which they are subjected. Always in using rapid divulsion employ an anæsthetic, as the pain of rupturing the circular fibres at the internal os is intolerable without it. I have now completed this dilatation to the extent of one inch. Having left the instrument in position for about three minutes, I remove it and proceed to the use of the curette.

I show you here an instrument consisting of a handle and four curetting points, varying in size and shape. In this case we shall use the instrument that bears my name. You will notice that I have removed several fungous growths. There has been in this case, therefore, an acute followed by a chronic endometritis and decided cicatricial contraction of the internal os, attended with an ante flexion.

An intra uterine douche will now be used. I show you the double canula, to which the Davidson syringe is attached for this purpose. The intra-uterine glass, or rubber plug is next inserted. This glass stem which I hold in my hand is too long, being $2\frac{3}{4}$ inches, while this uterine cavity itself is but $2\frac{1}{4}$ inches. We must not use a stem so long that it is in continual contact with the fundus. This rubber stem, with a length of two inches, will be more suitable. It is easily inserted and held in place by a cotton tampon. The object of the stem is to hold that which has been gained by the operation; that while resolution takes place there can be no ante flexion or contraction of internal os if the stem is *in situ*. The patient will be kept in bed for a week, and she will wear the stem perhaps for a month. Later it will be retained *in situ* with a cup pessary. In case of fever or nausea supervening, the stem will be removed and the hot douche used.

For the immediate cure of the pain in cases of dysmenorrhœa the use of anodynes may sometimes be justifiable, but there is always a fear of the possibility of the patient becoming habituated to their use. Electricity, either the constant or the interrupted current, will invariably relieve. Chloral per rectum, at the time, or a pencil suppository of iodoform and cocaine inserted in the

uterine cavity, one day before menstruation, will generally relieve the pain. Ten to fifteen grains of antipyrine may sometimes be given, and it has often helped me of late.—*Arch. of Gynecology.*

DISEASES OF CHILDREN.

The Therapeutical Value of Mineral Waters in the Diseases of Childhood.

DR. ISABEL LOWRY (*N. Y. Medical Record*) :

After a general discussion of the subject, the writer gives the following résumé concerning the therapeutic application of the American waters :

SALINE.—Principal Springs : Hathorn, Vichy, Saratoga, Deep Rock, St. Catherine's, Warm, N. Cal. *General application.*—Aperient, Tonic, Excitant, Feebly Laxative, Alterative. *Special application to Children's diseases.*—Scrofula, Rachitis, Articular inflammation, Cholera, Rheumatism, Anæmia.

GASEOUS.—Principal Springs : Saratoga, Ballston, Virginia Sweet, Rockbridge, Alleghany, Capon, Highland, Cal., Buffalo Lithia. *General application.*—Digestive, Stimulant, Laxative, Diuretic. *Special application.*—Nervous Diseases, Dyspepsia, Scrofula, Diarrhea, Cholera, Hysteria, Gastralgia.

SULPHUR.—Principal Springs : Red Sulphur, Sharon, Richfield, Harbin, Cal., Blue Licks, Greenbrier. *General application.*—Laxative, Sedative, Tonic, Digestive.—*Special application.*—Cutaneous diseases, Digestive diseases, Anæmia, Scrofula, Rheumatism, Bronchitis, Laryngitis, Hepatic engorgements.

FERRUGINOUS.—Principal Springs : Oak Orchard, Stafford, Columbian, Sans Souci, Bedford, Rawley. *General application.*—Reconstituent, Digestive.—*Special application.*—Anæmia, Chlorosis, Chronic diarrhea, Purpura, Prolapsus ani, Dyspepsia, Hemorrhages.

Sulphurous-Acid Fumigation in Whooping-Cough.

MR. F. E. MANBY, of Wolverhampton, England (*Practitioner*), states that, while he cannot advance such evidence of immediate cure as has been recorded by Dr. Mohn, he regards the sulphurous-

acid treatment as decidedly beneficial. He says:

The method is the following: The children are in the morning put into clean clothes and removed elsewhere. All their clothes and toys, etc., are brought into their bed-room, and sulphur is burned upon a few live coals in the middle of the room. The fire is allowed to remain in the room for five hours, and then the windows and doors are thrown open. The child sleeps in the room the same evening. About twenty five grammes (a little under an ounce) of sulphur to every cubic metre may be burned; this is equivalent to rather more than ten grains per cubic foot.

The additional precaution was taken of having the day-room fumigated in a like manner during the night—the children practically lived in an atmosphere of diluted sulphurous-acid gas for some days, while in several cases I had the process repeated at the end of a week. In every instance, without exception, my observation leads me to look upon the method as a practical cure for whooping-cough. There is no doubt about it—mothers and nurses all agree with me that an immediate improvement is effected. Cough is lessened in frequency, expectoration of the thick clogging mucus much facilitated, paroxysms lessened in violence, and sickness after them as a consequence scarcely known. The children pick up quickly, and in no case has the cough lasted in its form of reduced violence more than a fortnight after the treatment commenced; it gradually, but surely, abates and ceases.

I have had no specially severe bronchitic or pneumonic complications to deal with in the twenty or more cases in which I have applied the treatment, but I do not think I should desist if

such complications existed. My opinion must go for what it is worth, but I thoroughly believe that, if this method could be at all generally applied throughout the country during, say, six months from any given date, whooping-cough would become as rare a disease as the plague. The action of the sulphur must be that of a germicide, and in twenty-five years' experience I have seen nothing like such results from any other treatment.—*N. Y. Medical Journal*.

Incontinence of Urine.

FOR nocturnal incontinence of urine in a girl æt. fourteen, cold hip baths and $\frac{1}{60}$ gr. of strychnine t. d. were directed by Professor Parvin.—*Coll. and Clin. Record*.

Magisterium Bismuthi in Infantile Summer Diarrhea.

IN the St. Petersburg *Rüsskaia Medtżina*, Dr. PÜGINOFF emphatically declares that subnitrate of bismuth constitutes the most reliable remedy for epidemic summer diarrhea in nurslings. He gives the drug *larga manu*, feeling sure that a pure preparation is excreted *per anum* wholly and in an unaltered state. Thus, to an infant of $4\frac{1}{2}$ months, he administers $1\frac{1}{2}$ or 2 grains every 2 hours. The main advantages of the subnitrate over all other means are stated to be these: 1. The drug does not give rise to any untoward accessory symptoms. 2. It is readily taken and perfectly well borne. 3. It acts on the intestinal tract both as a sedative and antiseptic.—*St. Louis Med. & Surg. Jour.*

Two Cases of Hysteria in Boys.

THE first patient was a boy, aged eight years, belonging to a family of strongly marked neurotic disposition. His symptoms—developed rather suddenly—were constipation, vague com-

plaints of pain which could not be localized, at times inability to walk, a capricious appetite, and sometimes he insisted that he could not swallow. The treatment was mainly moral. A deaf ear was turned to his complaints, and he was kept from his brothers and sisters. The cure was complete.

The second case is of an entirely different type. The symptoms belonged entirely to the sensory sphere. He had severe headache, there were anæsthetic areas, hemianopia, and impaired hearing, all of which were changed in seat from time to time. The boy recovered without special treatment.

These cases are reported at length by the author. The occurrence of such cases in the male sex shows the absurdity of a designation which by its derivation implies the influence of an organ which that sex does not possess.—*Lancet*.—*Archiv. Pediatrics*.

Night Terrors.

FOR a child æt. 7, with night terrors, Dr. REX directed that the supper should consist of bread and milk only, restricted the general diet, and ordered ℞. Chloral hydrat., gr. iiss. Sig. Take at night and increase if necessary.

Early Infancy as an Organic Medium in its Relations to Tuberculosis.

THE clinical phenomena of tuberculosis as it is seen in adults, aged people or children, differ from each other so much in the different social conditions that one is tempted to ask whether the morbid condition is the same in all. In early infancy tuberculosis takes the form of a general disease. In place of being manifested by meningeal, digestive, or peritoneal disorder, it presents itself as a disease of the entire organism, which is accompanied with high fever. An autopsy in such a case may

not reveal any granulations in the spleen, liver, etc., while the organs may be swollen, and even the plaques of Peyer may be hypertrophied. Tuberculosis is also frequently manifested by digestive disturbances without the presence of true tuberculous granulations. In such cases there may be an attack of broncho-pneumonia, in the course of which the bacilli of tuberculosis are discoverable. Such a series of events not infrequently occur in connection with measles; the organism of some young children in this disease being converted into a sort of culture medium for the bacillus, which subsequently gives rise to the dyscrasic and thermic conditions of tuberculosis. The author believes that tuberculosis is much more frequent in childhood than writers upon the subject have supposed, but that it is masked under what appears to be a simple inflammatory disease. With regard to the pathogeny of tuberculosis in children, alimentation is a subject of great importance, especially when that is supplied by milk from an artificial source. The fact that tuberculosis in children is so common, and in calves so rare, suggests that something must be wrong with the way in which children are brought up. Prophylaxis of this disease in children may be realized in great measure, therefore, by always giving boiled rather than raw milk. The skin and the respiratory organs are also media by which the infection of tuberculosis may be communicated. Heredity also plays an important part in the pathogeny of tuberculosis and a child of tuberculous parents not only receives at birth a favorable soil for the germination of the disease, but, it may be, the very elements themselves which will produce the disease. The injurious influence of alcoholism and syphilis in parents upon their offspring is well

known; equally important is the influence of tuberculous parents upon their offspring, and it should receive proper attention.—*Le Concours Médical*.

The Function of the Stomach, and the Therapeutic Results of Washing out the Stomach in Infants.

LEO has investigated one hundred and thirty-four cases in infants, by washing out or sounding the stomach, and reported his results at a recent meeting of the Berlin Medical Society (*Medical Chronicle*). The sound has an internal circumference of five millimetres and an external of eight millimetres. When the stomach contains anything, it is usually spontaneously emptied; at other times the fluid contained in the lower part of the tube was examined, always undiluted, because small quantities of matters may escape observation when diluted, and an acid reaction may be changed on dilution to a neutral one. Thirty-five healthy children were examined, and among them twelve new born, from two hours to eight days old. The reaction after human milk was always neutral or feebly alkaline, after cow's milk slightly acid or slightly alkaline. Free hydrochloric acid could be found in the full stomach only after the lapse of an hour. Sometimes lactic acid was found, but never fatty acids. In the fasting stomach hydrochloric acid could almost always be found. From the fact that free hydrochloric acid is only found at the end of digestion, or in the empty stomach, it by no means follows that none is produced during digestion; it is only partially neutralized, partly transformed into acid salts. This acid-combining power of milk is decisive for the use of milk in ulcer and hyperacidity. Propeptone was almost always found in the fasting as well as in the full

stomach. Rennet ferment was always present; once, where it was doubtful, its enzyme was present. It was also found when hydrochloric acid was absent, and sometimes in large quantities. In suckling infants the stomach contents are not unfrequently streaked with rusty altered blood coloring matter, which arises not from blood swallowed intrapartum, but probably from slight gastritis, as a result of the still unusual digestive processes. At a later age this phenomenon disappears.

How long the milk remains in the stomach, and whether the emptying process takes place in gushes, were not ascertained. At all events a considerable quantity had passed into the stomach at the end of an hour. The time when all is got rid of is subject to variations according to age, and the kind and quantity of food taken. The stomach in breast-fed children during the first week is found empty at the end of half an hour, while in older ones a considerable quantity of food remains at that time. The milk extracted after a certain time was examined for propeptone and peptone, and compared with a sample of the milk given. After resting in the stomach for half an hour a considerable increase was found in both propeptones; peptone was only present half an hour later. Peptonization and the secretion of acid consequently take place in the stomach. The child's stomach serves chiefly as a reservoir for milk, the whole would be peptonized in the intestine. The clotting of the milk might be supposed to be a preliminary step essential to its digestion, but experiments with trypsin on clotted and unclotted milk gave no essential difference. A part of the micro-organisms entering the stomach are certainly hindered in their development by the acid. Whether the stomach acts as a

kind of bulwark against the penetration of organisms future work must show.

Fifteen minutes after food the reaction is always distinctly acid. Free acid is, however, not present till the end of digestion, but always in the fasting state. The quantity of acid secreted is considerably less than in adults.

The pathological conditions were studied in one hundred and four cases, sixty of acute dyspepsia with or without vomiting and with or without fever and intestinal mischief, twenty-two of expressed cholera infantum, sixteen of gastric catarrh, six of habitual diarrhea without disturbance of the appetite. The reaction was always acid except in some breast-fed children. Volatile fatty acids, lactic acid, acetic and butyric acid, were frequently present. The quantity of the latter may be very considerable. In one case the total acidity was equal to sixty cubic centimetres of one-tenth normal soda solution and fatty acids formed two-thirds of this. Not seldom an abnormally high percentage of hydrochloric acid was present particularly in subacute dyspepsia. Pepsin or pepsinogen was found in the majority of cases; rennet ferment was always present, therefore the milk was always clotted. One of the most constant accompaniments of dyspepsia in infants Epstein has pointed out,—namely, lengthened stay of the milk in the stomach. In one case Leo found twenty cubic centimetres of highly acid milk, containing much fatty acid, after seven hours. A similar condition was found also in chronic dyspepsia and in diarrhea. This atony of the stomach is apparently not the cause but the result of the disease, for the slowing of the emptying process remained in several cases days after all other subjective and objective symptoms had disappeared.

Tough mucous is present frequently in both acute and chronic dyspepsia. In two cases there were large coagula, consisting of mucin, in which epithelium, yeast-cells, and bacteria in large quantities were enclosed. On the introduction of the sound, gas escapes frequently, and also in healthy children.

Two points are to be insisted upon—1, it is easy to understand from these experiments why in dyspepsia of children hydrochloric acid either is without effect or acts injuriously; 2, the unsuitability of the administration of pepsin. On the contrary, the author's experiments show the benefit of washing out the stomach, because it is a certain means of removing the contents and compensating a dyspepsia, and is a handy method unattended by danger. Water, or water with a few drops of a twenty per cent. alcoholic solution of thymol, was employed, chiefly for washing out. Diluted milk or milk gruel is the best diet, in small quantities. The result is generally very favorable. Often one washing out suffices; in many, two; rarely seven were required. Vomiting ceases in a surprising way and appetite returns. The best results were obtained in acute gastritis, where frequently after one washing out fever and fits ceased. Less favorable were the results in cholera infantum, but always satisfactory, likewise in cases of chronic gastritis, with or without intestinal affection. Cases of habitual vomiting gave very good results, and in obstinate diarrhea the thymol solution proved serviceable.

Baginsky agreed with Leo as to the favorable results obtained from washing out, but it is to be avoided when the peritoneum is affected, and in cholera when collapse threatens, because the latter is apt to follow immediately the use of the tube. It is a sovereign remedy in habitual vomiting after weaning, in atonic

states of the intestine, as in rickets, and also in many cases of chronic dyspepsia.

Hensch had in collapse of cholera obtained very favorable results from repeated subcutaneous injections of common salt solution.—*Therapeutic Gazette*.

For the Constipation of Children.

A WRITER in *L'Union Médicale* suggests the following:—℞. Podophyllin, gr. $\frac{3}{4}$; alcohol, f 3 iss; syr. althææ, f 5 iv. M Sig.—A teaspoonful once daily.—*Coll. and Clin. Record*.

Doses of Medicine for Children.

THE following rules for doses of medicine to children are given in the *Indiana Medical Journal*:

Let 21 parts be an adult dose, then give as many parts as there are years in the child's age. Thus a child of one year would get $\frac{1}{21}$ of a dose; 6 years $\frac{6}{21}$; 14 years $\frac{14}{21}$.

For older persons let the full dose be represented by $\frac{21}{21}$ and invert the fractions thus: for a patient 65 years old $\frac{21}{65}$ of a dose; for 70 years $\frac{21}{70}$ or $\frac{3}{10}$; for 80 years $\frac{21}{80}$ or $\frac{3}{10}$, etc.

It must be borne in mind that children require smaller doses of sedatives, and larger doses of purgatives, proportionately, than are here given.—*Ibid*.

Treatment of Thrush.

DR. F. FORSCHEIMER takes up the symptomatology and treatment of stomatitis mycosa, or thrush, in the *Archives of Pediatrics*. Prophylaxis, he says, is as important as the treatment proper. All slight abrasions may become infected with the parasitic cause of the disease, the *saccharomyces albicans*. The mother or nurse should be taught how to keep the nipples clean and how to cleanse the mouth of the infant. The best disinfectant for the

feeding utensils is exposure to the temperature of boiling water for a little while. Every part of the apparatus should be so arranged that the boiling water can gain access to it, and that any deposit can be removed mechanically. When this is rigidly carried out, infection becomes impossible even in hospitals.

The treatment proper consists of two parts: the mechanical removal of the fungus, and its destruction. To accomplish the first, the attendants must be told to wash out the mouth at stated times—for instance, between the times of nursing and immediately after nursing. For this purpose, a solution of one dram of bicarbonate of soda to a tumbler of water is very serviceable. The remedies used must be applied four or five times daily, with a brush. He avoids syrups. In his own experience, he has rarely found it necessary to use any thing except sodium bicarbonate. Occasionally, when ulcers are produced, it becomes necessary to touch them with nitrate of silver; but in uncomplicated cases this is exceedingly rare. There are some cases, he says, which will resist any or all methods of treatment.

Calomel in small doses or corrosive sublimate, very much diluted, almost always act as a specific in intestinal troubles which are due to thrush. The relation between intestinal troubles and thrush must always be kept in mind and the indiscriminate use of cathartic alkalies or other laxatives must be prevented as doing the patient more harm than good, reducing his strength and being absolutely harmful and needless. Baginsky, he says, claims good results from resorcin, and warns against the use of too large a dose (from one-half to one per cent. solution—never more than one teaspoonful every two hours).

But Dr. Forscheimer does not see how this, or any other remedy, can produce an effect upon an œsophagus stopped up completely with plugs of parasitic growth. When a conjectural diagnosis of œsophageal thrush has been made, he regards it as most expedient to introduce the soft catheter into the œsophagus. In one case, he succeeded in gradually working his way into the stomach with a catheter; some of the masses were pushed into the stomach and were then removed by vomiting. The patient, however, died a few days afterward, and post-mortem examination showed that the œsophagus had been again filled up.

OBSTETRICS.

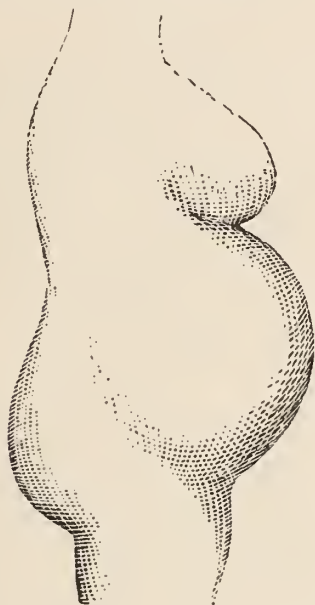
A Case of Hernia of Parturient Uterus through the Linea Alba.

DR. CHARLES E. HAGER (*Journal American Medical Association*):

In July, 1884, I delivered a primipara, Mrs. Blank (after a prolonged labor) of a full term female child. Forceps were used, with slight laceration of the perineum, which was immediately stitched up and healed perfectly. She made a good recovery, and showed no signs of ventral hernia.

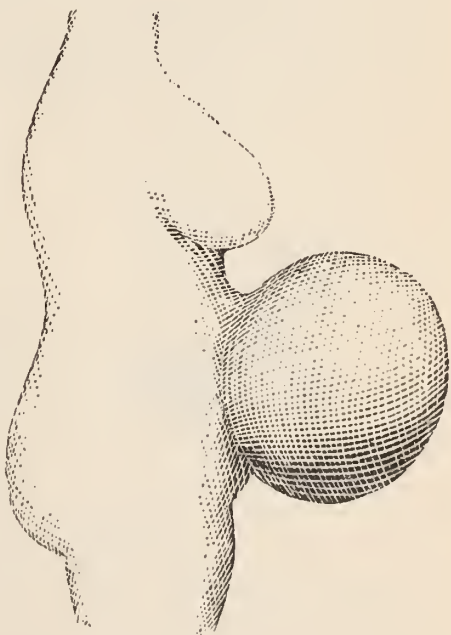
In March, 1886, Mrs. B. was delivered of a second full-term female infant without forceps, the perineum remaining intact, the labor being a short one (six hours), and perfectly normal. Within three months patient called my attention to a "lump" about the umbilicus. Upon examination I found an umbilical intestinal hernia, about the size of an egg, which was readily reduced, the opening being large enough to permit the introduction of the end of the finger. An abdominal truss was ordered which retained it perfectly. The patient wore this until she was taken in labor with her third child, in February, 1888.

On February 8 was called to see Mrs. B., and found her in the first stage of labor, os dilating and pains frequent. I remained an hour, when, everything progressing normally, I left her for an hour and a half. Upon my return found



the bag of waters ruptured, patient in bed and in active labor; os fully dilated, head engaging L. O. A. The labor progressed normally and actively for about an hour and a half, examinations being made from time to time. Suddenly the patient after a very violent pain, called out and said: "Oh doctor, I am tired out, I can no longer bear down." It had been about ten minutes since my last examination. On approaching the bed, I observed that the abdominal tumor, heretofore perfectly normal, presented a peculiar appearance, being much more prominent, and seeming to project at right angles to the patient's body, she lying on her back. Upon lifting the sheet, I was startled to find that the uterus had left the abdominal cavity, and was covered only by the skin, which was tightly stretched, and seemed as

thin as tissue paper. The uterine vessels were clearly seen, also the contractions, when a pain came on. The head at this time was in the vagina, and I immediately saw that the woman was correct in saying that she could make no expulsive effort. Notwithstanding the uterine contractions, which were regular, and strong and visible, the head making no advance, and the patient becoming exhausted, I immediately applied the forceps and delivered the child. There was no difficulty in applying the forceps, as the head was well down, but the impossibility to restore the uterus to its normal position, and its tendency to fall to one side or the other, made it necessary to have the nurse support it



in the median line until the child was extracted. It proved to be another fine healthy girl. The placenta was quickly extracted by the hand, as the patient seemed exhausted, and I was most anxious to terminate the labor.

As soon as the placenta was removed, there was little trouble in replacing the

uterus through the opening in the walls of the abdomen, it having thoroughly contracted, and reached its proper size. A suitable bandage was applied, and the woman made a good recovery. It is surprising to find how small an opening there seems to be in the abdominal wall at present. The lady was in my office to-day; she is wearing the abdominal bandage she wore before her last pregnancy, and says she suffers no inconvenience. I had not seen her before for several months, and sent for her so that I could report her present condition.

Artificial Suckling.

It is some time since PAUL BUDIN suggested an apparatus to facilitate the suckling of infants which are not capable of performing that act for themselves by reason of some weakness or deformity. The manner in which this

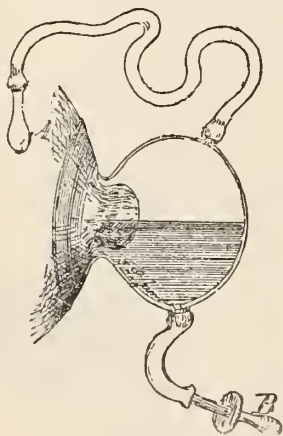


Fig. 27. Budin's Apparatus. A, Nipple used by mother. B, Nipple used by child.

may be accomplished, with the aid of the mother, is indicated by Fig. 27, the *modus operandi* readily suggesting itself. —*St. Louis Med. and Surg. Journal*.

Pregnancy.—Delivery at Sixth Month.

A CORRESPONDENT of the *Southern Californian Practitioner* writes from Vienna: A few days ago I witnessed

Professor BRAUN perform an interesting operation. A girl, *æt.* 17, was brought to the clinic, pregnant in the sixth month, but from some unknown cause the child had died twenty-four hours previously, and the mother already had considerable fever, with a very fetid discharge. The os was dilated to the size of a dollar, and the head was presenting. Craniotomy was decided upon as the best method of treatment. An anæsthetic was administered and a vaginal douche given of warm thymol solution 1 : 1000. Then Professor Braun entered the intra-uterine trephine and removed a piece of one of the parietal bones. On removing the trephine he broke up the soft membranes with his finger, put in a one-half inch tube, and forcing in a stream of water through it washed out the brains. The cranioclast was now applied and the child forcibly delivered, the cord was tied, and after waiting a quarter of an hour the placenta was expelled by Créde's method, and the uterus washed out with hot 1 : 1000 thymol solution. The day following her temperature was lower, and on the second day it was normal.

Ingluvin in the Vomiting of Pregnancy.

DR. POPP (*Pester Medicin. Presse*) reports having achieved considerable success with ingluvin in the vomiting of pregnancy. Having a very obstinate case, upon which he had exhausted the entire resources of the pharmacopœia, he administered three times daily, one-half hour before mealtime, eight grains of ingluvin, and directly afterward two tablespoonfuls of one per cent. hydrochloric acid solution. An improvement was observed after a few doses had been taken, and a cure effected after the treatment had been continued for three weeks. —*Deutsche Med. Wochen.*

PUBLISHERS' DEPARTMENT.

Practical Use of Phenacetin.

HOUSE OF REST FOR CONSUMPTIVES,
TREMONT, N. Y.

PHENACETIN has been extensively used in this institution especially in intercostal neuralgia, neuralgia of the fifth pair, particularly where the symptoms are persistent and do not yield to other remedies, always with beneficial results. It has also been found efficient in that generally nervous condition of patients which may best be described as fidgety.

It has been generally exhibited in ten and fifteen grain doses, repeated every two hours until four or five doses have been taken. No ill results have ever been noticed.

W. E. S. PRESTON, M. D.,
House Physician.

Listerine.

E. B. STEVENS, A. M., M. D., President Obstetrical Society of Cincinnati, says: I am highly pleased with the effects of LISTERINE. Its special character adapts it to a large range of purposes, both externally and internally; disinfects completely the hands of the obstetric and gynæcic practitioner; disinfects offensive conditions of the utero-vaginal passages, especially where there are bad smelling discharges. It is a delightful gargle and mouth-wash. Withal, as compared with carbolic acid, especially, there is the same grateful advantage—the agreeable odor in using.

In a recent and very extended epidemic of diphtheria, I employed LISTERINE almost exclusively, ordering a solution of one part LISTERINE and eight parts water as a gargle, allowing the patient, especially if a young child, to swallow it freely. Sometimes I add the usual amount of chlorate of potash, but I find the LISTERINE far more satisfactory than chlorate of potash alone.

Menorrhagia,—Leucorrhœa.

MACADAM GRIGOR, L. R. C. S., L. R. C. P., Alexandra avenue, Battersea Park, London, says: F. O., widow, 32 years of age, one child, suffered for years, and was frequently under medical treatment, getting little or no relief. When she came under my care, about three months ago, I found her very weak and anæmic, complained of pain in left hypogastric region and sympathetic vomiting. She told me that at the menstrual period she nearly flooded, and between the times, only 14 days, she suffered very much with the whites. I thoroughly examined her and diagnosed: Irritation of left ovary, menorrhœa, leucorrhœa, prolapsus with atresia of uterus, inflamed meatus urinarius, the effect of this being

anæmia. Under treatment she improved in general health, but still the menorrhœa and leucorrhœa continued, though I had exhausted the remedies used in such cases.

When the Aletris Cordial came under my notice six months ago, I put my patient under its treatment, with the result that the menorrhœa and leucorrhœa have ceased, and the slight prolapsus uteri gives no discomfort. I may state that I still keep her under the tonic.

National Association of Railway Surgeons.

The Annual Meeting of the National Association of Railway Surgeons will be held at St. Louis, Mo., on Thursday and Friday, May the 2d and 3d, 1889. The prospects are that this will be one among the largest gatherings of medical men ever assembled in this country. Dr. W. B. Outten, of St. Louis, is the Chairman of the Committee of Arrangements, and everything will be complete for the accommodation of the surgeons. Any information desired can be had by addressing the Secretary, C. B. Stemen, M. D., Fort Wayne, Ind.

American Medical Association.—Fortieth Annual Meeting.

To be held at Newport, R. I., June 25, 26, 27 and 28, 1889.

NOTICE TO EXHIBITORS.—Intending exhibitors should address Dr. Chas. A. Brackett, Newport, R. I., Chairman Sub-Committee upon Exhibits. The following class of applications will be entertained: 1. Medical books and stationery, charts and diagrams, busts, portraits, engravings, photographs, etc. 2. Hospital and ambulance plans and models. 3. Surgical instruments and supplies, general and special (gynæcic, obstetric, orthopedic, laryngeal, otic, ophthalmic, dental, etc.). 4. Microscopes, analysis outfits, and electro-galvanic apparatus. 5. Pharmaceutical products. 6. Rubber goods applicable to medicine and surgery. 7. Invalid furniture. 8. Invalid foods. 9. Sanitary appliances, as ventilators, filters, w. c. basins, traps, and similar necessities, and disinfectants.

As a large attendance is probable, while the space available for exhibits is comparatively limited, the advantage of early application will be perceived.

Choice of space will be given in accordance with the date of application.

Applicants should state the character of their proposed exhibits, that they may be assigned to their respective groups.

The Sub-Committee reserve the right of rejection in case of apparent reason.

HORATIO R. STORER, M. D.,
Chairman Committee of Arrangements.



THE DENTIST'S SOFT TEMPERED STUB STEEL ROUND
NERVE BROACHES.

OLOF JOHANSON,
 PATENTEE AND SOLE MANUFACTURER,
 No. 1 MAIDEN LANE, NEW YORK.

OLOF JOHANSON,
DENTISTS' NERVE BROACH,

Patent No. 251,598. Patented Dec. 27, 1881.

Postage paid to any part of the United States and Canada.

Since patenting these Broaches, I have improved them by making them cylindrical instead of conical, permitting of a more distinct barb at the point, also the permanent attachment to each Broach of a brass stem of convenient size and length for handling. Dentists who have examined these improved broaches, and are using them, say they are perfection and far superior to any broach made, being so finely tempered, they never break in the nerve canal as is so often the case with those usually made.

By recent improvements the Broaches are made in four sizes. For Sale by all Wholesale Dealers only.

Note following from some of the most prominent Dentists in the United States. *The undersigned Dentists, state that they are familiar with all the various kinds of Dental Broaches manufactured; that they are acquainted with and have used the Broach invented, patented, and manufactured by OLOF JOHANSON of New York City; and that they consider said Broach superior to any known to them, and use it in preference to all others.*

| | | |
|--|----|--------|
| Norman N. Kingsley, No. 25 West 27th Street, New York, in practice | 29 | years. |
| E. S. Woodward, No. 361 Fifth Avenue, | 20 | " |
| George F. Schaffer, No. 44 West 34th Street, | 17 | " |
| John B. Rich, M. D., No. 12 East 22d Street, | 43 | " |
| William A. Dwinelle, M. D., No. 27 West 34th St., | 41 | " |
| A. S. Northrope, No. 44 West 4th Street, | 20 | " |
| N. Malon Beckeirth, No. 125 West 42d Street, | 42 | " |
| E. Todd, No. 47 East 29th Street, | 12 | " |
| W. D. Tenison, No. 45 East 28th Street, | 19 | " |
| M. M. Maltby, D. D. S., No. 32 East 24th Street, | 14 | " |
| W. A. Bronson, M. D., No. 8 East 34th Street, | 30 | " |
| C. E. Francis, D. D. S., No. 33 West 44th Street, | 21 | " |

Spiral Handle.—I can furnish these Broaches with my new Spiral Handle, thus giving a flexible and pliable Handle that can be bent to any shape and be of great use to the operator.

Send all orders to **OLOF JOHANSON,**
 No. 1 Maiden Lane, NEW YORK CITY.

FELLOWS' HYPO-PHOS-PHITES

(SYR : HYPOPHOS : COMP : FELLOWS)

Contains *The Essential Elements* to the Animal Organization — Potash and Lime ;

The *Oxydizing Agents* — Iron and Manganese ;

The *Tonics* — Quinine and Strychnine ;

And the *Vitalizing Constituent* — Phosphorus,

Combined in the form of a syrup, with *slight alkaline reaction*.

It Differs in Effect from all Others, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

It has Sustained a High Reputation in America and England for efficiency in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs, and is employed also in various nervous and debilitating diseases with success.

Its Curative Properties are largely attributable to Stimulant, Tonic and Nutritive qualities, whereby the various organic functions are recruited.

In Cases where enervating constitutional treatment is applied, and tonic treatment is desirable, this preparation will be found to act with safety and satisfaction.

Its Action is Prompt: stimulating the appetite and the digestion, it promotes assimilation, and enters directly into the circulation with the food products.

The Prescribed Dose produces a feeling of buoyancy, removing depression or melancholy, and hence is of great value in the treatment of MENTAL AND NERVOUS AFFECTIONS.

From its exerting a double tonic effect and influencing a healthy flow of the secretions, its use is indicated in a wide range of diseases.

Each Bottle of Fellows' Hypophosphites contains 128 Doses.

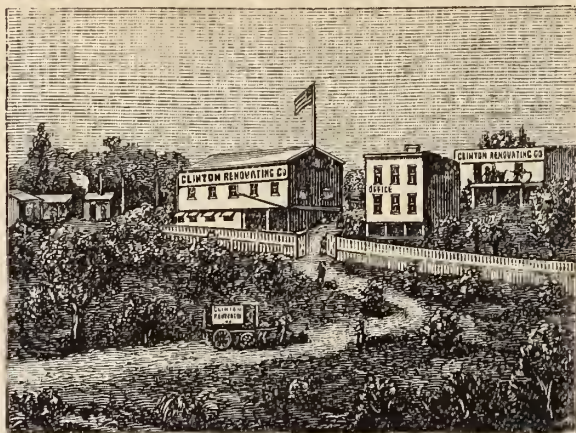
Prepared by JAMES I. FELLOWS, Chemist,
48 Vesey Street, New York.

Circulars and Samples sent to Physicians on application.

FOR SALE BY ALL DRUGGISTS.

CLINTON RENOVATING COMPANY.

OFFICE:
359
 CLINTON ST.
 Cor. Degraw,
BROOKLYN,
N. Y.



THE
NAPHTHA
BATH
 USED ONLY BY
 THIS
 COMPANY.

This Company calls the attention of the medical profession and the public to their system of Renovating and Disinfecting by the use of the

NAPHTHA BATH.

This process can be applied to all article of Furniture, Beds, Bedding and Mattresses, without either ripping or taking them apart. Every one who has tried this system pronounces it perfect, and the Company would like you to practically convince yourself of its merits.

Goods called for and delivered in Brooklyn, free of charge.

This Company refers to: Sheppard Knapp & Co., 13th Street and Sixth Avenue, New York.

J. R. Hegeman, Vice-Pres. Metropolitan Life Ins. Co., New York.

H. W. Maxwell, 70 First Place, Brooklyn.

Dr. O. C. Gage, 26 West 31st Street, New York; and many others.

DOCTORS, LOOK HERE!!

FIRE AND BURGLAR PROOF
SAFES
AT WHOLESALE.

WANTED!

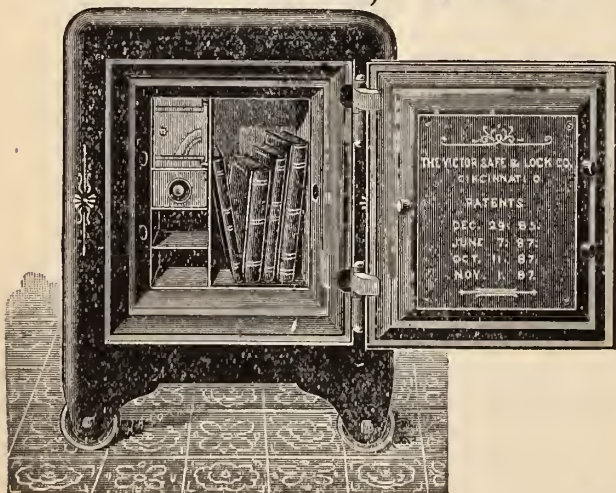
WANTED!

WANTED!

The names and addresses of all Lawyers, Doctors, Merchants, small dealers, Farmers, Housekeepers, and men of every calling

WHO HAVE NO SAFES.

We will furnish you with a first-class Safe, strictly fire-proof, burglar-proof combination lock, beautifully finished and lettered with name, at \$12 and upwards.



DEATH TO HIGH PRICES.

We pay no salaries or commissions to middlemen nor agents. We have no high salaried officers, but practice strictest economy to enable us to sell direct to the user at **LOWEST WHOLESALE PRICES.** The **Victor Safes and Locks** are the latest improved and are manufactured under excellent patents, issued Dec. 29th, 1885; June 7th, 1887; Oct 11th, 1887; and Nov. 1st, 1887.

Every Safe is guaranteed Satisfactory. Our prices are about 80 per cent. lower than any others. Write for our prices and terms at once. *Don't fail to mention the Digest.*

THE VICTOR SAFE & LOCK CO.,

118 West 7th Street,

CINCINNATI, OHIO.



VALENTINE LINN,
MANUFACTURER OF
FINE CARRIAGES,

47, 49, 51 & 53 BERGEN STREET, BROOKLYN, N. Y.

Telephone call 760.

*Broughams, Octagons, Coupes, Four and Six Seat Rockaways,
Victorias, Cabriolets, Extension and Canopy Top
Phaetons, and Surreys, Etc.*

PHYSICIANS' PHAETONS A SPECIALTY.

Below will be found the names of a few of the many physicians who have them now in use and will recommend them for their superior qualities. I make five different styles of them. Catalogues and Price Lists will be furnished on application.

Dr. Henry Armgardt, 317 Leonard St., Brooklyn, N. Y.
" E. S. Bunker, 117 St. Johns Place, " "
" John Byrne, 301 Clinton St., " "
" Wm. M. Butler, 507 Clinton Ave., " "
" C. M. Bellows, 442 Nostrand Ave., " "
" N. M. Carter, 499 Washington Ave., " "
" E. Ettinge, 2 Verona Place, " "
" George Fowler, 645 Marcy Ave., " "
" William Gillfillan, Reimsen & Henry St., " "
" E. Hilton, 204 South 8th St., " "
" H. J. Hesse, late Coroner, 163 Bushwick Ave.
Brooklyn, N. Y.
" M. A. D. Jones, 163 Dekalb Ave., " "
" Chas. N. D. Jones, 163 Dekalb Ave., " "
" Chas. Jewett, 307 Gates Ave., " "
" Geo. C. Jeffery, 304 Jefferson Ave., " "
" J. C. Lester, 406 Clinton St., " "
" Nathan Matson, 415 Green Ave., " "

Dr. William Matson, 415 Green Ave., Brooklyn, N. Y.
" John A. McCorkle, 149 Clinton St., " "
" John Merritt, 22 Lafayette Ave., " "
" Wm. C. Murray, 436 Lewis Ave., " "
" C. H. Muncie, 363 Tompkins Ave., " "
" N. J. Preston, 98 Lafayette Ave., " "
" Frank W. Rockwell, 6 Lafayette Ave., " "
" H. B. Smith, 131 Fort Green Place, " "
" A. Sanford, 345 Tompkins Ave., " "
" James Sweeney, 192 North 6th St., " "
" C. B. Schlatter, 158 Seventeenth St., " "
" Chas. T. Schmidt, 73 Stagg St., " "
" James J. Terhune, 171 Adelphi St., " "
" William Watersworth, 493 Franklin Av., " "
" Walter L. Ranney, 14 West 32nd St., N. Y.
" F. W. Knapp, Orange, N. J.
" W. W. Heberton, Orange, N. J.

"The Ideal Lustre"

Is a Peculiar Brilliancy of the Teeth,
combined with a

Ruddy Healthfulness of the Gums,
by which you can at once detect the user of the



"IDEAL" IN { NAME. NATURE. RESULTS,
as slight familiarity will prove.

Recommended by Prominent Dentists everywhere,
among them Dr. T. B. Arnold, 127 W. 34th St., N. Y.,
writes: "It has no equal for Polishing
the Teeth and Hardening the Gums."

Dr. C. H. Bartlett, a noted dentist of St. Louis, calls
it: "The Best thing ever offered to the
public as a cleansing agent for the
teeth."

Adopted in Hospitals for its cleanliness and freedom
from infectious results; as a fresh polisher can be used
every time at slight expense.

Its Economy. Holder (imperishable) 35 cents.
Polishers only need be renewed. 18 (boxed) 25 cents.
Dealers or mailed.

HORSEY MFG CO., Utica, N. Y.

TO ADVERTISERS!

For a check for \$20 we will print a ten-line advertisement in One Million issues of leading American Newspapers and complete the work within ten days. This is at the rate of only one-fifth of a cent a line, for 1,000 Circulation! The advertisement will appear in but a single issue of any paper, and consequently will be placed before One Million different newspaper purchasers; or FIVE MILLION READERS, if it is true, as is sometimes stated, that every newspaper is looked at by five persons on an average. Ten lines will accommodate about 75 words. Address with copy of Adv. and check, or send 30 cents for Book of 256 pages.
GEO. P. ROWELL & CO., 10 SPRUCE ST., NEW YORK.

We have just issued a new edition of our Book called "Newspaper Advertising." It has 256 pages, and among its contents may be named the following Lists and Catalogues of Newspapers:—
DAILY NEWSPAPERS IN NEW YORK CITY, with their Advertising Rates.

DAILY NEWSPAPERS IN CITIES HAVING more than 150,000 population, omitting all but the best.
DAILY NEWSPAPERS IN CITIES HAVING more than 20,000 population, omitting all but the best.

A SMALL LIST OF NEWSPAPERS in which to advertise every section of the country: being a choice selection made up with great care, guided by long experience.

ONE NEWSPAPER IN A STATE. The best one for an advertiser to use if he will use but one.

BARGAINS IN ADVERTISING IN DAILY Newspapers in many principal cities and towns, a List which offers peculiar inducements to some advertisers.

LARGEST CIRCULATIONS. A complete list of all American papers issuing regularly more than 25,000 copies.

THE BEST LIST OF LOCAL NEWSPAPERS, covering every town of over 5,000 population and every important county seat.

SELECT LIST OF LOCAL NEWSPAPERS, in which advertisements are inserted at half price.

5,472 VILLAGE NEWSPAPERS, in which advertisements are inserted for \$12.15 a line and appear in the whole lot—one-half of all the American Weeklies.
Book sent to any address for **THIRTY CENTS.**



VACCINE VIRUS.

Pure and Reliable Animal Vaccine
Lymph, Fresh Daily.

LIBERAL TERMS. SEND FOR CIRCULAR.

10 Ivory Points.....double charged, \$1.00
10 Quill Slips (half quills).....double charged, 1.00
Orders by Mail or Telegraph promptly dispatched.

NEW ENGLAND VACCINE CO.,

Chelsea Station, Boston, Mass.

WM. C. CUTLER, M. D.

J. F. FRISBIE, M. D.

CHAS. R. AVERY,

PHARMACIST,

447 COURT ST., Cor. 4th PLACE,

BROOKLYN, N. Y.

Prescriptions carefully compounded.

PARKE, DAVIS & Co.'s AND SQUIBB'S

PREPARATIONS IN STOCK.

Telephone Call, 1023.

CHARLES DENNIN,

Druggist & Apothecary

FIRST PLACE,

Cor. Court St.

BROOKLYN, N. Y.

TELEPHONE CONNECTION.

SQUIBB'S PREPARATIONS DISPENSED.

CELERINA

NERVE TONIC, STIMULANT AND ANTISPASMODIC.

FORMULA.—Every Fluid Drachm represents FIVE grains EACH—Celery, Coca, Kola, Viburnum and Aromatics.

INDICATIONS.—Loss of Nerve-Power (so usual with Lawyers, Preachers, Writers and Business Men), Impotency, Spormatorrhea, Nervous Headache, Neuralgia, Paralysis, Hysteria, Opium Habit, Inebriety, Dyspepsia, and ALL LANCUID conditions of the System.

Indispensable to restore a patient after alcoholic excess.

DOSE.—One or two Teaspoonfuls three or more times a day, as directed by the Physician.

LIQUID IRON-RIO

Palatable and easily assimilated. Does not produce Nausea, nor irritate the Stomach. Does not Cause Headache, nor Constipate. Does not Stain the Teeth. It is so Acceptable to the Stomach that its Use is Admissible when all other forms of Iron would be rejected. Being so Readily Assimilable, it only requires a small Dose.

Each Fluid Drachm contains ONE GRAIN of Iron in a Pleasant and Digestible Form.

DOSE.—One or more Teaspoonfuls as indicated, during or after meals.

S. H. KENNEDY'S

CONCENTRATED EXTRACT OF

PINUS CANADENSIS

DARK.

A NON-ALCOHOLIC LIQUID.

WHITE.

A MOST VALUABLE NON-IRRITATING MUCOUS ASTRINGENT.

INDICATIONS.—Albuminuria, Diarrhea, Dysentery, Night-Sweats, Hemorrhages, Profuse Expectoration, Catarrh, Sore Throat, Leucorrhea, and other Vaginal Diseases, Piles, Sores, Ulcers, Burns, Scalds, Conorrhea, Cleet, Etc.

When Used as an Injection, to Avoid Staining of Linen, the WHITE Pinus should be used.

RECOMMENDED BY PROMINENT EUROPEAN AND AMERICAN PHYSICIANS.

RIO CHEMICAL CO., St. Louis, Mo., U. S. A.

LONDON.

PARIS.

CALCUTTA.

MONTREAL.

MEDICO-CHIRURGICAL COLLEGE, OF PHILADELPHIA.

SESSIONS OF 1888-1889.

FACULTY.

JAMES E. GARRETSON, A.M., M.D.,
Professor of Oral Surgery and of Clinical Surgery.
WILLIAM H. PANCOAST, A.M., M.D.,
*Professor of General, Descriptive and Surgical
Anatomy, and of Clinical Surgery.*
GEORGE E. STUBBS, A.M., M.D.,
Professor of Surgical Pathology and Clinical Surgery.
WILLIAM F. WAUGH, A.M., M.D.,
*Professor of Principles and Practice of Medicine and
of Clinical Medicine.*
ABRAHAM S. GERHARD, A.M., M.D.,
*Professor of General Pathology and of Medical Juris-
prudence.*
WILLIAM S. STEWART, A.M., M.D.,
Professor of Obstetrics and of Clinical Gynaecology.
H. EARNEST GOODMAN, M.D.,
*Professor of Principles and Practice of Surgery, Ortho-
pædics and of Clinical Surgery.*

PETER D. KEYSER, A.M., M.D., DEAN,
Professor of Ophthalmology.
THOMAS C. STELLWAGEN, M.A., M.D.,
Professor of Physiology.
FRANK WOODBURY, A.M., M.D.,
*Professor of Materia Medica and Therapeutics, and
of Clinical Medicine.*
SAMUEL B. HOWELL, A.M., M.D.,
Professor of Chemistry.
JOHN V. SHOEMAKER, A.M., M.D.,
Professor of Skin and Venereal Diseases.
EDWARD E. MONTGOMERY, B.S., M.D.,
Professor of Didactic and Clinical Gynaecology.
WILLIAM B. ATKINSON, M.A., M.D.,
Professor of Sanitary Science and of Pædiatrics.

OTHER INSTRUCTORS.

ISAAC BARTON, M.D.,
*Lecturer on Laryngology and Chief Asst. in Throat
Clinic.*
M. H. CRYER, M.D., *Lecturer on Oral Surgery.*
FRANK FISHER, M.A., M.D.,
*Lecturer on Ophthalmoscopy, and Chief Assistant in
Eye Clinic.*
BENJAMIN T. SHIMWELL, M.D.,
*Lecturer on Minor surgery, and Chief-Assistant in
Prof. Goodman's and Garretson's Surgical Clinic.*
W. G. MCCONNELL, M.D., *Lecturer on Venereal
Diseases.*
SPENCER MORRIS, M.D., *Lecturer on Symptomatology*
CONRAD BERENS, A.B., M.D.,
Lecturer on Otolgoy, and Chief-Assistant in Ear Clinic
W. XAVIER SUDDUTH, M.D., F.R.M.S.,
*Lecturer on Diseases of the Genito-Urinary System,
and Demonstrator of Pathological Histology.*
HENRY C. BOENNING, M.D., *Demonstrator of
Anatomy.*
E. S. GANS, M.D., *Instructor in Dermatology.*
E. L. B. GODFREY, M.D., *Lecturer on Fractures.*
A. E. ROUSSEL, M.D., *Adjunct to the Chair of Practice*
L. HARRISON METTLER, M.D.,
Lecturer on Electro-Therapeutics.
G. W. McCASKY, M.D.,
Lecturer on Mental and Nervous Diseases.
WILLIAM M. WELSH, M.D.,
Lecturer on the Exanthemata.
CHARLES M. SELTZER, M.D.,
Lecturer on Therapeutic Dietetics.
MAX J. STERN, M.D., *Instructor in Laryngology.*

E. L. VANSANT, M.D.,
*Chief-Assistant in Medical Dispensary; Demonstrator
of Normal Histology.*
JOHN AULDE, M.D.,
Demonstrator of Physical Diagnosis.
J. W. WEST, M.D., *Demonstrator of Gynaecology.*
L. GREENBAUM, M.D., D.D.S.,
Demonstrator of Chemistry.
HENRY FISHER, Ph. G., M.D.,
Demonstrator of Pharmacy.
E. GREWER, M.D., *Demonstrator of Practical
Physiology.*
T. RIDGWAY BARKER, M.D.,
Assistant in Clinical Surgery.
M. F. LORMAN, M.D.,
Chief-Assistant to the Surgical Clinic.
ROBERT WHARTON, M.D.,
Assistant in Surgical Clinic.
VICTOR G. R. RHEN, M.D.,
Assistant in Pædiatrics.
LOUIS VON COTZHAUSEN, M.D., Ph.G.,
Assistant in Medical Clinic.
J. J. TAYLOR, M.D., *Assistant in Medical Clinic.*
W. J. HOLLY, M.D., *Assistant in Surgical Clinic.*
C. FITZPATRICK, JR., M.D.,
Assistant in Surgical Clinic.
W. A. N. DORLAND, M.D., *Assistant in Gynaecology.*
A. L. SAVAGE, M.D., *Assistant in Clinical Surgery.*
P. S. DONNELLAN, L.K.Q.C.P., L.R.C.S.I., L.M.,
Assistant in Medical Dispensary.
C. L. FISHER, M.D.,
Assistant in Prof. Pancost's Surgical Clinic.

Every candidate for admission who does not present a degree in Arts or Sciences, a certificate of graduation in a high or normal school, or a certificate of having passed a satisfactory examination of a duly organized County Medical Society, must undergo an examination in English, Latin, Physics and Mathematics. The examination may be conducted by one of the Censors or at the College. Instruction is given by lectures, clinical teaching and practical demonstrations. In the subjects of Anatomy, Pharmacy, Chemistry, Histology and Pathological Anatomy, the usual methods of instruction are largely supplemented by laboratory work. The year begins Sept. 10th, and is divided into a preliminary session of three weeks, a Regular session of six months and a Spring session of ten weeks. Students are divided into three classes according to their time of study and proficiency. Students who have begun their professional studies elsewhere may be admitted to advanced standing upon satisfactory examination in the branches already pursued by the class to which they seek admission. Although the degree of DOCTOR OF MEDICINE is conferred at the end of three years' study, a fourth year is provided which is voluntary (but attendance upon which will afford the student increased facilities for practical study in clinical medicine, surgery and the various specialties.

ORDER OF STUDIES:

FIRST YEAR:—Anatomy (bones and ligaments), Physiology, General Chemistry, Materia Medica and Pharmacy, General Pathology and Hygiene. SECOND YEAR:—Anatomy (muscles, vessels and viscera), Medical Chemistry, Physiology, Physical Diagnosis, Therapeutics, Clinical Medicine, and Clinical Surgery. THIRD YEAR:—Anatomy (Nervous System), Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgical Pathology, Surgery, Clinical Surgery, Ophthalmology, Dermatology, Syphilis, Diseases of Women, Diseases of Children, Electro-Therapeutics and Forensic Medicine. FOURTH YEAR:—Ophthalmology, Otolgoy, Dermatology, Syphilis, Laryngology, Mental and Nervous Diseases, Diseases of Women, Diseases of Children, Clinical Medicine, Clinical and Operative Surgery, Orthopedic Surgery, Oral Surgery, Forensic Medicine, Genito-urinary Diseases, Diseases of the Rectum, Diseases of the Female Bladder, Bacteriology, Clinical Microscopy, Preparation of Food for Infants and Invalids and Anæsthetics.

REQUIREMENTS FOR A DEGREE:—Every candidate must be twenty-one years of age, must have attended three or four full terms, one Winter session of which was spent at this school, have passed a written examination upon the prescribed studies of the course.

FEES:—Matriculation, \$5; for the first and second years, each, \$75; for the third year (graduation included), \$100; for the fourth year, to graduates of this school free; to graduates of other schools upon the payment of a matriculation fee, only graduates of a three years school will be permitted to join the graduating class for the degree of this school upon the payment of a fee of \$40. The above fees are conditional upon their being paid before Nov. 1st.

For further information, or Catalogue, address

Dr. E. E. MONTGOMERY, Sec'y, 1518 Arch St., or
Medico-Chirurgical College, Philadelphia, Pa.

THE STROUT Heating and Ventilating System,

FOR DWELLING HOUSES, CHURCHES AND
PUBLIC HALLS.

H. C. STROUT & CO.

(Successors to Strout & Williams),

MANUFACTURERS OF

Strout's Patent Heating and Ventilating Attachments.

OFFICE:

No. 564 STATE ST., Cor. Flatbush Ave., BROOKLYN, N. Y.

The object of the Strout System is to equalize the temperature of buildings and prevent direct drafts and an unequal distribution of hot air, regulating its circulation so that all portions, upper and lower, shall be of uniform temperature and purity.

The system is exclusively adapted to dwelling houses, churches and all public halls and buildings that are heated from either the enclosed or portable furnace. It can readily be applied to any furnace in present use. The practical introduction of the same has invariably shown:

1. Its health-giving qualities in preserving at all times a pure circulation of heated air.

2. It makes the furnace distribute its maximum of heat, with a saving in coal of not less than 25 per cent., and in churches and public halls the gain is even greater.

For further particulars and circulars, address manufacturers as above.

CLASSIC—
Unique—



Grotesque—

Romantic



~~~~~for~~~~~  
Publishers~~~~~

~~~~~Merchants~~~~~

~~~~~Societies~~~~~

~~~~~Advertisers~~~~~

P. F. McBREEN
PRINTER

Steam Power
Improved Presses
New Types

61 BEEKMAN STREET
NEW YORK

Estimates Furnished

Established 1872

DIOVIBURNIA

A POWERFUL UTERINE TONIC AND ANTISPASMODIC.

The most **PERFECT** compound **EVER OFFERED** to the **MEDICAL PROFESSION** for the relief of the following female disorders: **DYSMENORRHOEA, AMENORRHOEA, MENORRHAGIA, LEUCORRHOEA, SUBINVOLUTION, PUERPERAL CONVULSIONS, RELAXED** condition of **UTERUS** and **APPENDAGES** and **THREATENED ABORTION**; directing its action in a most remarkable manner to the entire **UTERINE** system as a general tonic and **ANTISPASMODIC**, and in cases of impaired vitality. *Complete Restoration follows its use.*

This happy combination is the result of an **EXTENSIVE PROFESSIONAL EXPERIENCE RUNNING THROUGH A SERIES OF YEARS**, in which the constituent parts have been **FULLY TESTED**, singly and in combination, in various proportions, until **PERFECTION** has been **ATTAINED**. We, with the profession, have no regard for secret remedies.

DIOVIBURNIA

is prepared for prescribing exclusively, and the Formula as given, will commend itself to every intelligent physician.

FORMULA.

VIBURNUM PRUNIFOLIUM, VIBURNUM OPULUS, DIOSCOREA VILLOSA, ALETRIS FARI-
NOSA, HELONIAS DIOICA, MITCHELLA REPENS, CAULOPHYLLUM
THALICTROIDES, SCUTELLARIA LATERIFLORA.

Every ounce contains $\frac{1}{2}$ dram each, of the fluid extract. For further information see bottom of this page.

PALPEBRINE

A TRUSTWORTHY REMEDY IN EXTERNAL EYE DISEASES.

THE forms of disease for which this compound is highly recommended are the following: *Simple Conjunctivitis, Acute and Chronic Catarrhal Conjunctivitis, Vernal Conjunctivitis, Acute and Chronic Blepharitis, Strumous or Scrofulous Conjunctivitis, Marginal Blepharitis and Inflammation of the Lachrymal Sac.*

PALPEBRINE is not a *secret* remedy, and in offering it to the general practitioner we give the formula in full. It contains no unknown and untried agents, but is composed of the following well-known drugs which will commend it to the profession at once.

FORMULA AND MEDICAL PROPERTIES:

| | |
|---|--------------------|
| ACIDUM BORACICUM, [an antiseptic] | One per cent. |
| HYDRARGYRUM BICHLORIDUM, [an antiseptic and irritant] | One part in 5,000. |
| TINCTURE OF OPIUM, [nerve tonic, slightly narcotic] | A trace. |
| ZINCUM SULPHURICUM, [an irritant astringent] | One part in 1,000. |
| GLYCERINUM PURUM, [an irritant] | One par. in 10. |

EYE diseases are the best and most fruitful field for quackery, and the amount of harm being done by *quacks* and *patent medicines* in eye diseases is fearful to behold. In offering **PALPEBRINE** to the profession we wish to give to the busy practitioner a reliable and safe remedy, easily prescribed, of known qualities and quantities. We are certain after a trial our efforts will be appreciated.

TO any physician, unacquainted with the medicinal effects of **DIOVIBURNIA** and **PALPEBRINE**, we will mail pamphlet containing full information, suggestions, commendations of some of the most prominent practitioners in the profession, and various methods of treatment; also a variety of valuable prescriptions that have been thoroughly tested in an active practice, or to physicians desiring to try our preparations, and who will pay express charges, we will send on application a full size bottle of each free.

DIOS CHEMICAL COMPANY, ST. LOUIS, MO., U. S. A.

THE
AMERICAN MEDICAL DIGEST
 A MONTHLY EPITOME
 OF
MEDICAL LITERATURE AND SCIENCE.

This old established Magazine is claimed by the Medical Profession to be the most useful, as it is conceded to be the most popular Medical Journal published in America, presenting as it does each month in attractive and readable form, a skillfully condensed Digest of the best current Medical Literature of this Country and Europe, prepared directly for its pages by a corps of well known specialists, under able editorial supervision.

The issues of each year constitute a complete volume, in which is embodied a comprehensive record of the World's Medical and Surgical achievements during that period, concisely stated, carefully classified and extensively illustrated.

It is distinctively

A JOURNAL OF MEDICAL PROGRESS,

replete with information and practical suggestions that are invaluable to the busy practitioner, who would be compelled to search through the technical literature of the whole world to find the same facts outside of its pages.

The Physician by its aid is enabled to save time, labor and expense, in keeping himself thoroughly informed in all that is occurring in his profession which it would be useful for him to know, and its regular monthly appearance precludes all possibility of his falling behind his colleagues in familiarity with the progress of the period.

Its practical value is attested to by nearly Seven Years of successful existence, and the unflinching testimony of its extensive list of subscribers is that

NO DOCTOR CAN AFFORD TO BE WITHOUT IT

who is ambitious of occupying a creditable position in or near the front rank of his profession.

Determined to extend its field of usefulness to the furthest attainable limits, the management of THE AMERICAN MEDICAL DIGEST has at considerable expense brought new influences to bear upon its interests, which, without altering, will, it is believed, considerably expand its scope. All that it has been in the past it will continue to be, while new features will be added from time to time which will increase its utility and value.

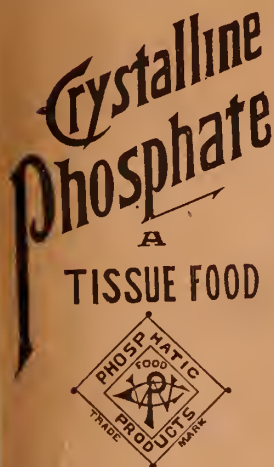
Meanwhile the Subscription Price remains

\$2 PER YEAR.

payable in advance to the Publishers

The Analyst Publishing Company,
19 PARK PLACE,
NEW YORK.

A Peerless Chemico-Physiological Food and Restorative



Contains all essential inorganic components of the tissues in a semi-solid, easily soluble, crystalline mass,

COMPOSED OF

ACID PHOSPHATE OF CALCIUM.

WITH

| | |
|------------------------------|------------------------|
| Acid Phosphate of Magnesium, | Chloride of Potassium, |
| " " " Iron, | " " Sodium |
| " " " Sodium, | Sulphate of Potassium, |
| " " " Potassium, | and Phosphoric acid. |

INDICATIONS:

STOMACH DISORDERS, such as Indigestion, Flatulence Gastric Catarrh, and Poor Appetite, Constipation, etc.

WRONGS OF NUTRITION, as in Scrofula, Rickets, Caries, Marasmus, Delayed Union of Fractures, Necrosis of Tissue, Difficult or Delayed Dentition and Development, etc.

NERVOUS AND GENERAL DEBILITY AND SLEEPLESSNESS, as from Sexual Excess, Venereal Disease, Childbearing, Nursing, Loss of Blood or other fluids, Menstrual and other Diseases of Women, abuse of Alcohol, Tobacco and Narcotics, Protracted Illness, etc.

DEBILITY AND DYSPEPSIA.—*Your preparation of Crystalline Phosphate, I have found to be very excellent in cases of Debility from Nerve Exhaustion. It is a good auxilliary in Gastric and Dyspeptic Troubles, and from my experience I regard it as a reliable preparation.*

T. GRISWOLD COMSTOCK, A. M., M. D., Ph. D., St. Louis, Mo.

Write for Samples and Treatise—Mailed Free. Mention this Journal.

PROVIDENT CHEMICAL WORKS, - - **ST. LOUIS, MO., U. S. A.**
E. C. RICH CO., Limited, New York City, Eastern Agents,

BOUND VOLUMES FOR 1888.

Subscribers sending us the twelve numbers for 1888 with \$1, can have them returned handsomely bound. Any missing number will be supplied for twenty cents additional.

THE ANALYST PUBLISHING CO.,

19 Park Place,

New York.

THE DIGESTIVE FERMENTS

AS

Solvents of Diphtheritic Membrane.

TRYPSIN.

This ferment, of the pancreas is worthy of use upon ground of theory and of experience. It is a powerful solvent of fibrin in water without the interaction of alkali or acid.

It exhibits its greatest activity in slightly alkaline media.

Trypsin has been applied with success in the solution of diphtheritic membrane.

Many physicians have voluntarily communicated to us reports of successful cases in their practice.

From our knowledge of the actual digestive properties of trypsin, and upon information that it is capable of effective application, we respectfully commend it to the attention of the medical profession.

We make no claim about the cure of diphtheria with trypsin, or of the extent of its influence in the treatment of this disease.

We submit trypsin upon the basis of its properties as the most capable of all digestive principles, animal or vegetable, in a pure aqueous or in alkaline media.

If the conditions admit of its being brought into contact with the membrane, in persistently repeated application, either in powder or mixture with brush or spray, its real value can be put to test with great possibilities for good.

If the necessary portion of the mixture is warmed to 115° F. it will act more quickly than when cold. But it must be heated cautiously, to avoid killing the digestive principle. It does not require to be in solution simply in admixture.

PEPSIN.

Pepsin is inert upon fibrin without the interaction of acid.

The gastric ferment should be used with water acidulated to about a half or one per cent, with hydrochloric acid U. S. P. although it also acts with lactic, citric, tartaric, and phosphoric acid, etc.

Pepsin does not require to be in solution; simply in admixture with the water and acid.

In diphtheria, pepsin is necessarily restricted to cases where the application of acid is permissible.

The albumen digesting principle of plants is in acid media greatly inferior to pepsin, in alkaline or neutral media greatly inferior to trypsin.


The Fairchild Digestive Ferments are most active, permanent, and reliable.

MADE BY

FAIRCHILD BROS. & FOSTER,

NEW YORK.

LONDON.



THE AMERICAN MEDICAL DIGEST

ISSUED IN
MONTHLY PARTS

VOL. VIII.

MAY 15, 1889.

PART 5.

TWO DOLLARS A YEAR.

INDEX ON PAGE 2.

EDITED BY

JOHN C. LESTER, A.M., M.D.

COLLABORATORS.

ALEXANDER J. C. SKENE, M.D.,

Professor of the Medical and Surgical Diseases of
Women, Long Island College Hospital.

ARTHUR MATHEWSON, M.D.,

Professor of Ophthalmology, Long Island College
Hospital.

LANDON CARTER GRAY, M.D.,

Professor of Nervous and Mental Diseases, N. Y.
Polyclinic.

BENJ. F. WESTBROOK, M.D.,

Chief of Dept. Diseases of Chest, at St. Mary's and
Seney Hospitals.

A. H. BUCKMASTER, M.D.,

Gynecologist to St. Peter's Hospital.

F. R. STURGIS, M. D.,

Professor Venereal Diseases, College of Physicians
and Surgeons, N. Y.

GEORGE HENRY FOX, M.D.,

Professor of Diseases of the Skin, College of
Physicians and Surgeons, N. Y.

CHARLES JEWETT, M.D.,

Professor of Obstetrics, Long Island College Hospital.

A. H. P. LEUF, M.D.,

Demonstrator of Anatomy and Histology and
Lecturer on Pathology at the Pennsylvania
School of Anatomy and Surgery.

W. T. BULL, M.D.,

Surgeon to New York Hospital.

R. G. ECCLES, M.D.

NEW YORK:

ANALYST PUBLISHING CO.
19 Park Place.

Entered at the Post Office at New York, N. Y., as second-class matter.
Copyrighted, 1889, by the American Medical Digest Publishing Company.

LACTOPEPTINE.

The most important Remedial Agent ever presented to the Profession for

Dyspepsia, Vomiting in Pregnancy, Cholera Infantum, Constipation, and all Diseases arising from Imperfect Nutrition.

LACTOPEPTINE precisely represents in composition the natural digestive juices of the Stomach, Pancreas and Salivary Glands, and will, therefore, readily dissolve all foods necessary for the recuperation of the human organism.

LACTOPEPTINE

IS COMPOUNDED WITH

**Gentian, Iron, Strychnia, Bismuth, Quinia, Calisaya,
Cinchona and Phosphates,**

And various Medications required in general Practice in the form of

ELIXIRS, SYRUPS, LIQUIDS, Etc.

Special Notice to the Medical Profession.

Whenever satisfactory results are not obtained from the administration of **Lactopeptine** we will consider it a favor if such facts are reported to us, for there can be no doubt that substitution of Pepsin or some of the cheap imitations of Lactopeptine has been practised, whenever the therapeutic activity of Lactopeptine is not uniformly demonstrated in its indications, *Send address for our new MEDICAL ALMANAC, containing valuable information.*

THE NEW YORK PHARMACAL ASSOCIATION.

Box 1574.

NEW YORK.

SUCCUS ALTERANS.

(McDADE.)

SUCCUS ALTERANS is a purely vegetable compound of the preserved juices of *Stillingia Sylvatica*, *Lappa Minor*, *Phytolacca Decandra*, *Smilax Sarsaparilla* and *Xanthoxylum Carolinianum*, as collected by DR. GEO. W. McDADE exclusively for ELI LILLY & Co., and endorsed by DR. J. MARION SIMS.

SUCCUS ALTERANS continues to gain favor from its remarkable Alterative and Tonic properties, *eliminating specific poison from the blood and increasing the proportion of red corpuscles in anemic patients* to a wonderful degree; is endorsed by the medical profession and in use by many hospitals of note.

SUCCUS ALTERANS in venereal and cutaneous diseases is fast supplanting Mercury, the Iodides and Arsenic; and is a certain remedy for Mercurialization, Iodism and the dreadful effects often following the use of Arsenic in skin diseases.

SUCCUS ALTERANS is also strongly recommended for its Tonic and Alterative effects in myriad forms of scrofulous disease, and in all cases where anæmia is a factor. Such patients rapidly develop a good appetite, sleep soundly and gain flesh rapidly. Many cases are on record where patients increased ten to twenty-five pounds in weight in a few weeks.

SUCCUS ALTERANS is giving satisfactory results in treatment of *Chronic Rheumatism* and can be used with confidence.

SUCCUS ALTERANS may be given for any length of time, without injury to the patient.

SUCCUS ALTERANS is put up in pint round amber bottles and *never in bulk.*

PHYSICIANS who have not received DR. McDADE's latest publication, the *MONOGRAPHIA SYPHILITICA*, should send their address, mentioning this journal, and we will mail a copy. It contains a paper, illustrated with colored plates, by DR. D. H. GOODWILLIE, of New York, on the "Sequelæ of Syphilis," reports of cases in practice and many other valuable papers.

ELI LILLY & CO., Pharmaceutical Chemists,
Indianapolis, Ind., U. S. A.

SUPPLIED BY ALL DRUGGISTS.

THE
AMERICAN MEDICAL DIGEST
A MONTHLY EPITOME
OF
MEDICAL LITERATURE AND SCIENCE.

This old established Magazine is claimed by the Medical Profession to be the most useful, as it is conceded to be the most popular Medical Journal published in America, presenting as it does each month in attractive and readable form, a skillfully condensed Digest of the best current Medical Literature of this Country and Europe, prepared directly for its pages by a corps of well known specialists, under able editorial supervision.

The issues of each year constitute a complete volume, in which is embodied a comprehensive record of the World's Medical and Surgical achievements during that period, concisely stated, carefully classified and extensively illustrated.

It is distinctively

A JOURNAL OF MEDICAL PROGRESS,

replete with information and practical suggestions that are invaluable to the busy practitioner, who would be compelled to search through the technical literature of the whole world to find the same facts outside of its pages.

The Physician by its aid is enabled to save time, labor and expense, in keeping himself thoroughly informed in all that is occurring in his profession which it would be useful for him to know, and its regular monthly appearance precludes all possibility of his falling behind his colleagues in familiarity with the progress of the period.

Its practical value is attested to by nearly Eight Years of successful existence, and the unflinching testimony of its extensive list of subscribers is that

NO DOCTOR CAN AFFORD TO BE WITHOUT IT

who is ambitious of occupying a creditable position in or near the front rank of his profession.

Determined to extend its field of usefulness to the furthest attainable limits, the management of THE AMERICAN MEDICAL DIGEST has at considerable expense brought new influences to bear upon its interests, which, without altering, will, it is believed, considerably expand its scope. All that it has been in the past it will continue to be, while new features will be added from time to time which will increase its utility and value.

Meanwhile the Subscription Price remains

\$2 PER YEAR.

payable in advance to the Publishers,

The Analyst Publishing Company,
19 PARK PLACE,
NEW YORK.

INDEX.

MEDICINE.

| | PAGE | | PAGE |
|---|------|--|------|
| Anæmia | 66 | Lungs—Non-Metastatic Abscess of..... | 78 |
| “ —Dr Conkling on..... | 67 | Malaria—Hypodermic Injection of Quinine in..... | 65 |
| Brain—Excitations of, Influence on Functions..... | 72 | Mental Diseases—Hypnotics, &c., in..... | 70 |
| Breath—Fetid, Pastils for..... | 65 | Nephritis—Ethereal Tinct. of Perchloride of Iron in..... | 79 |
| Colds and Clothing | 68 | Pancreatitis—Acute..... | 67 |
| Constipation—Prescription for | 76 | Peritonitis—Tubercular | 67 |
| Diphtheria Affecting Perineal Region | 66 | Pills—Tonic | 76 |
| Diuretic—Juniper Berries as..... | 79 | Phthisis—Hot Air Cure | 78 |
| Drugs—When to Administer..... | 65 | “ —Laryngeal—Lactic Acid in | 77 |
| Dysentery—Chronic, Enemata in | 76 | Pleurisy—Purulent, Punctures in | 66 |
| Dyspepsia—Chloroform in | 77 | Purgative Pills—Bell's | 76 |
| Endocarditis—Early sign of..... | 80 | Sciatica—Da Costa on..... | 70 |
| Epilepsy—Dilution of Bromides in..... | 70 | Sun Stroke..... | 66 |
| Gall Stones—Bartholow on..... | 76 | Tapeworm—Treatment of..... | 75 |
| Hæmatemesis—Da Costa on..... | 76 | Thermo-polypnæic Centre and Thermotaxis..... | 69 |
| Hemorrhoids—Internal—Gross on..... | 67 | Tonic Pills..... | 77 |
| Insomnia—Treatment of..... | 72 | Tubercle—Bacilli nf. | 78 |
| Locomotor Ataxia—Suspension in Treatment of..... | 71 | | |

SURGERY.

| | PAGE | | PAGE |
|---|------|---|------|
| Acne—Treatment of | 76 | Otorrhœa—Boracic Acid in Powder and Solution... .. | 79 |
| Burns—Lotion for | 67 | Post-Mortem Examinations in Infants—Method of | |
| Conjunctival Sac—Bacteriology and Antisepsis..... | 80 | Conduct | 68 |
| Cranium—Gun Shot Wound of..... | 66 | Pruritis Pudendi—Peppermint Water in..... | 76 |
| Erythema Nodosum—Chronic..... | 76 | Surgery—Bidet in | 70 |
| Ether—Administration of, Dr. Shrady | 67 | “ —Cerebral, Interesting Case | 71 |
| Fingers—Injuries of, Conservatism in | 72 | “ —Minor, Conservatism in Injuries of Fingers | 72 |
| Fractures of Lower Extremities—Wiring | 65 | Sutures and Ligatures—Linen Thread for..... | 67 |
| Gonorrhea—Treatment of McCaw..... | 73 | Sycosis—Clinical Study of..... | 77 |
| Gun Shot Wounds of Cranium | 66 | Urethral Fever—Nature and Prevention | 74 |
| Hands—Glass Blowers' Deformity of | 65 | Vidal's Red Plaster..... | 76 |
| Mosquito Bites—Chloroform in | 67 | Wound Dressings—Boric Acid and Oil of Cacia as.. | 69 |
| Nasal Deformity—Plastic Operation in..... | 66 | | |

DISEASES OF WOMEN AND CHILDREN, AND OBSTETRICS.

| | PAGE | | PAGE |
|--|------|--|------|
| Abortion and Neuralgia—Relation | 79 | Labor—Undescribed Cause of Delay in second stage. .. | 78 |
| Cervix Uteri—Pathogeny and Treatment of Diseases | | Menorrhagia—Dr. Peters on..... | 72 |
| of | 68 | Pelvic Abscesses—Treatment of..... | 71 |
| Children—Treatment of Acute Bronchitis in..... | 74 | Pregnancy—Constipation in..... | 80 |
| Chorea—Etiology of | 75 | Pyosalpinx..... | 65 |
| Endometritis—Puerperal, Curette in | 80 | Scarlet Fever—Period of Infection | 73 |
| Hydrosalpinx—Electrical Treatment nf..... | 69 | Sterility from Inaptitude for Ovulation and Incuba- | |
| Infancy—Relation of Bacteria in Diarrheal Diseases | | tion..... | 70 |
| in | 76 | Uterine Appendages—Treatment of Suppurative | |
| Infants—Phlegmon of the Orbit in..... | 73 | Disease | 65 |
| Labor—Antipyrin in | 77 | | |

Specify "Battle" when Prescribing Our Preparations.

Specify "Battle" when Prescribing Our Preparations.

BROMIDIA

THE HYPNOTIC.

FORMULA.—

Every fluid drachm contains 15 grains EACH of Pure Chloral Hydrat. and purified Brom. Pot., and one-eighth grain EACH of gen. imp. ext. Cannabis Ind. and Hyoscyam.

DOSE.—

One-half to one fluid drachm in WATER or SYRUP every hour, until sleep is produced.

INDICATIONS.—

Sleeplessness, Nervousness, Neuralgia, Headache, Convulsions, Colic, Mania, Epilepsy, Irritability, etc. In the restlessness and delirium of fevers it is absolutely invaluable.

IT DOES NOT LOCK UP THE SECRETIONS.

PAPINE

THE ANODYNE.

Papine is the Anodyne or pain-relieving principle of Opium, the Narcotic and Convulsive Elements being eliminated. It has less tendency to cause Nausea, Vomiting, Constipation, Etc.

INDICATIONS.—

Same as Opium or Morphia.

DOSE.—

(ONE FLUID DRACHM)—represents the Anodyne principle of one-eighth grain of Morphia.

BATTLE & CO.,

CHEMISTS' CORPORATION,

BRANCHES:

76 New Bond Street, London, W.

5 Rue de la Paix, Paris.

9 and 10 Dalhousie Square, Calcutta.

ST. LOUIS, MO.

The only prominent Emulsion of Cod-Liver Oil introduced directly to the medical profession. It is advertised exclusively in medical journals.

HYDROLEINE.

(HYDRATED OIL.)

Produces rapid increase in Flesh and Strength.

FORMULA.—Each Dose contains:

| | |
|--------------------------------------|---------------------------|
| Pure Cod Liver Oil.....80 m. (drops) | Soda.....1-2 Grains |
| Distilled Water.....35 " | Sulphuric Acid.....1-4 " |
| Soluble Pancreatin.....5 Grains. | Hyocholic Acid.....1-10 " |



Recommended and Prescribed by
EMINENT PHYSICIANS Everywhere.
It is pleasant to the Taste and
acceptable to the most delicate Stomach.

IT IS ECONOMICAL IN USE AND CERTAIN IN RESULTS.

HYDROLEINE (Hydrated Oil) is not a simple alkaline emulsion of oleum morrhuae, but a hydro-pancreated preparation, containing acids and a small percentage of soda. Pancreatin is the digestive principle of fatty foods, and in the soluble form here used, readily converts the oleaginous material into assimilable matter, a change so necessary to the reparative process in all wasting diseases.

The following are some of the diseases in which **HYDROLEINE** is indicated:

Phthisis, Tuberculosis, Catarrh, Cough, Scrofula, Chlorosis,

General Debility, etc.

TO BRAIN WORKERS of all classes, **HYDROLEINE** is invaluable, supplying as it does, the true brain-food, and being more easily assimilated by the digestive organs than any other emulsion.

The principles upon which this discovery is based have been described in a treatise on "The Digestion and Assimilation of Fats in the Human Body," and "Consumption and Wasting Diseases," by two distinguished London physicians, which will be sent free on application.

SOLD BY DRUGGISTS GENERALLY.

C. N. CRITTENTON,

SOLE AGENT FOR THE UNITED STATES.

115 FULTON STREET, N. Y.

A Sample of Hydroleine will be sent free upon application, to any physician (enclosing business card) in the U. S.

Carnrick's Soluble Food

IS THE NEAREST APPROACH TO HUMAN MILK THAT HAS THUS
FAR BEEN PRODUCED.

During the past season a large number of Physicians and eminent Chemists visited our Laboratory at Goshen, N. Y., and witnessed every detail connected with the production of CARNRICK'S SOLUBLE FOOD. This invitation to witness our process is continuously open to Physicians and Chemists. All expenses from New York to Goshen and return will be paid by us. The care used in gathering the milk, its sterilization, and the cleanliness exercised in every step, cannot be excelled.

Pancrobilin.

Prepared (in both Liquid and Pill form) from Extract of Pancreas and Bile.

This preparation is designed expressly to increase the digestion and absorption of fats.

We believe that the fat-digesting properties of pancreatine and bile are inseparable, and that without their union in the intestinal tract but little, if any, fat would be digested and absorbed.

PANCROBILIN will be found of great service in *Phthisis and other wasting diseases, Nervous Prostration, Constipation, Inanition, Malnutrition, Intestinal Indigestion* and wherever there is a failure to assimilate fats.

If the skin is first wet with LIQUID PANCROBILIN, the inunction of oils will be greatly facilitated.

LIQUID PANCROBILIN is put up in pound bottles.

PILL PANCROBILIN is put up in bottles holding 100 pills. The coating of the pills will resist acid digestion when given as directed, but will be quickly dissolved in the alkaline secretions of the duodenum.

Phospho-Caffein Comp.

(Granular Effervescing.)

Formula for each dessertspoonful :—

Caffein.

Acidi Phosphorici ññ, grains, ss.

Antipyrin.

Ext. Apii. Grav. dulc. (Celery), ññ grains, i.

Sodium Bromide, grains, v.

The satisfactory results produced by PHOSPHO-CAFFEIN COMP. in *Headaches, Neuralgia, Insomnia, Neurasthenia and general Nervous Irritability*, are not due to the effect of any one ingredient, but to the happy effect of the combination. A thorough series of comparative tests have demonstrated the superiority of the above formula over any other in the market.

REED & CARNRICK, New York.

An Important Communication TO PHYSICIANS.

Thirteen years have now elapsed since the introduction of SCOTT'S EMULSION of PURE NORWEGIAN COD LIVER OIL with HYPOPHOSPHITES of LIME and SODA, since which time its growth and development have been very large, not only in this country but in South America, Great Britain and a large part of Continental Europe, and it has, in a very large degree, supplanted the Plain Cod Liver Oil. Its success is largely due to the happy combination of all its components, making a perfect chemical union, that will not separate for years, which we believe is not true of any other Cod Liver Oil preparation.

The innumerable reports from Physicians, of the brilliant results obtained justifies the statement that in almost every case where Cod Liver Oil is indicated, the combination of Cod Liver Oil with the Hypophosphites as prepared in Scott's Emulsion is infinitely superior.

Physicians who have never tried this Emulsion, or who have been induced to try something else in its stead, will do us the favor to send for sample, and we know they will always use it in preference to plain Cod Liver Oil or any other preparation.

We also call your attention to the following preparations:

CHERRY-MALT PHOSPHITES.

A combination of the tonic principles of Prunus Virginiana, Malted Barley, Hypophosphites of Lime and Soda, and Fruit Juices. An elegant and efficient brain and nerve tonic.

BUCKTHORN CORDIAL (Rhamnus Frangula.)

Prepared from carefully selected German Buckthorn Bark, Juglans Bark, and Aromatics. The undoubted remedy for Habitual Constipation. Send for samples of the above—delivered free.

SCOTT & BOWNE, Mfg. Chemists, 132 & 134 S. 5th Ave., N. Y.

Send for
CLUB RATES on
MEDICAL JOURNALS
To ANALYST PUBL'G CO.,
19 Park Place, N. Y.

THE BEST OF AMERICAN.

Specify

PLANTEN'S CAPSULES.

Known as Reliable over 50 years for "General Excellence."

Established 1836.

H. PLANTEN & SON, 224 William Street
NEW YORK.

SOFT and HARD CAPSULES

FILLED, OF ALL KINDS.

Nine Sizes: 3, 5, 10 and 15 Min. and 1, 2½, 5, 10 & 15 Gram.

NEW KINDS:

WINTERGREEN, APIOL,

Sandalwood, Erigeron, Terebene, Etc.

Improved. Empty, 8 sizes.

Capacity in Grains: 12, 10, 5, 4, 2, 1, ½, ¼.

For taking medicines free of taste, smell, injury to the teeth, mouth or throat.

Rectal, Vaginal, Horse, For Liquids
3 Sizes. 6 Sizes. 6 Sizes. 8 Sizes.

Trial box of all above Empty, by mail, 25 cents.

Capsules for Mechanical Purposes.

New Articles, and Capsuling Private Formulæ, a Specialty. Sold by all Druggists. Samples free.

Specify PLANTEN'S on all orders.

**THE BEST ANTISEPTIC.
FOR BOTH INTERNAL AND EXTERNAL USE.**

LISTERINE.

Formula.—Listerine is the essential antiseptic constituent of Thyme, Eucalyptus, Baptisia, Gaultheria and Mentha Arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzo-boracic Acid.

Dose.—Internally: One teaspoonful three or more times a day (as indicated), either full strength, or diluted, as necessary for varied conditions.

LISTERINE is a well-proven antiseptic agent—an antizymotic—especially adapted to internal use, and to make and maintain surgical cleanliness—asepsis—in the treatment of all parts of the human body, whether by spray, irrigation, atomization, or simple local application, and therefore characterized by its particular adaptability to the field of

PREVENTIVE MEDICINE—INDIVIDUAL PROPHYLAXIS.

Physicians interested in LISTERINE will please send us their address, and receive by return mail our new and complete pamphlet of 40 quarto pages, embodying:

A TABULATED EXHIBIT of the action of LISTERINE upon inert Laboratory Compounds;
FULL AND EXHAUSTIVE REPORTS and clinical observations from all sources, confirming the utility of LISTERINE as a General Antiseptic for both internal and external use; and particularly
MICROSCOPIC OBSERVATIONS, showing the comparative value and availability of various antiseptics in the treatment of Diseases of the Oral Cavity, by W. D. MILLER, A.B., Ph.D., D.D.S., Professor of Operative and Clinical Dentistry, University of Berlin, from whose deductions LISTERINE appears to be the most acceptable prophylactic for the care and preservation of the teeth.

DISEASES OF THE URIC ACID DIATHESIS LAMBERT'S LITHIATED HYDRANGEA. KIDNEY ALTERATIVE—ANTI-LITHIC.

Formula.—Each fluid drachm of "Lithiated Hydrangea" represents thirty grains of FRESH HYDRANGEA and three grains of CHEMICALLY PURE Benzo-Salicylate of Lythia. Prepared by our improved process of osmosis, it is INVARIABLY OF DEFINITE and UNIFORM therapeutic strength, and hence can be depended on in clinical practice.

Dose.—One or two teaspoonfuls four times a day (preferably between meals.)

Urinary Calculus, Gout, Rheumatism, Bright's Disease, Diabetes, Cystitis,
Hæmaturia, Albuminuria, and Vesical Irritations generally.

WE have had prepared for the use of Physicians **Dietetic Notes**, suggesting the articles of food to be allowed or prohibited in several of these diseases.

A neatly bound book of these Dietetic Notes, each note perforated for the convenience of Physicians in detaching and distributing to their patients. Mailed gratis upon request, together with our latest compilation of case reports and clinical observations, bearing upon the treatment of this class of diseases.

BRIGHT'S DISEASE.

DIETETIC NOTE.—A rigid milk diet has given good results in many cases.

Allowed.—Fish, sweet breads, sago, tapioca, macaroni, baked and stewed apples, prunes, etc.; spinach, celery, lettuce, etc., may be used in moderation in connection with a milk diet, with impairing its effect, and with great comfort and enjoyment to the patient.

Avoid.—Strong coffee and tea, alcoholic stimulants, soups and made dishes.

**LAMBERT PHARMACAL COMPANY,
SAINT LOUIS.**


May 15, 1889.

No. 5, Vol. VIII.

THE
AMERICAN MEDICAL DIGEST
ISSUED MONTHLY.

A DIGEST OF CURRENT MEDICAL LITERATURE,
ABSTRACTS AND REVIEWS; IN THREE PARTS:
MEDICINE,—SURGERY,—DISEASES OF
WOMEN AND CHILDREN,
AND OBSTETRICS.

PART I.
MEDICINE.

 Address all communications on Advertising, Subscription and Editorial business, Books for reviewing, etc., to the Publishers,

THE ANALYST PUBLISHING CO.,

19 Park Place, New York.

THE NEW HYPNOTIC SULFONAL-BAYER.

SULFONAL was discovered by Prof. Eugen A. Baumann, of Freiburg University, and was first prepared by the Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld.

SULFONAL (Diethylsulfondimethylmethan) is in the form of colorless prisms, odorless and tasteless, melting at 125.5° C. (258° F.) and has the composition $(C_2H_5)_2C=SO_2$. It is slightly soluble in cold water, but easily soluble in hot water or alcohol.

SULFONAL was first examined as to its physiological and pathological effects by Prof. A. Kast, of Freiburg University, and its hypnotic action was discovered and studied by him.

Since then SULFONAL has been the subject of numerous trials and experiments by many eminent and experienced physicians. Their testimony is unanimously favorable, and the conclusions reached by them are as follows:

SULFONAL is a prompt and reliable hypnotic which in proper doses produces quiet, natural sleep, lasting a number of hours.

SULFONAL has no unfavorable effects on the heart and the circulation, nor on the temperature, the pulse, or the respiration.

SULFONAL produces no disagreeable secondary symptoms; the patients with very few exceptions awake from their sleep feeling strong and greatly refreshed.

SULFONAL does not interfere with the process of digestion.

SULFONAL is a hypnotic, and not a narcotic; it acts by giving rest to the cells of the cerebral cortex, thereby causing sleep.

SULFONAL does not create an unconquerable desire for its repeated use; there is no danger of a SULFONAL-habit. Neither is it necessary to increase the dose after long-continued use.

SULFONAL is best administered at supper time, dissolved in hot liquids, *e. g.*, a bowl of soup or broth, a cup of milk, tea, coffee, cocoa, etc.

These points will be found to be fully exhibited in the series of contributions contained in our pamphlet, which will be mailed on application.

SULFONAL-BAYER is supplied by us in half-ounce and one-ounce vials.

We prepare 5-grain and 15-grain Tablets of Sulfonal-Bayer. The Tablet form is admirably adapted to the purpose of administering this drug, as when they are placed in the liquids, they disintegrate and are thus received into the system.

We also put up Sulfonal-Bayer in the form of our Soluble Pills, containing five grains each.

THE NEW ANTIPYRETIC PHENACETINE-BAYER.

Phenacetine-Bayer (Para-Acetphenetidine) is a white, glossy, crystalline powder, perfectly tasteless, melting at 135° C.—307° F. and has the composition $C_{10}H_{11}NO_2$, $\text{NH}(\text{CO}-\text{CH}_3)$.

It is slightly soluble in water, a little more soluble in glycerine, but most freely in alcohol.

Phenacetine-Bayer was first prepared by the Farbenfabriken, formerly Friedr. Bayer & Co., Elberfeld, and is of absolute purity and uniform quality.

Summarizing the superiority of Phenacetine-Bayer over other antipyretics and antineuralgics, the following conclusions are formed.

1. Phenacetine-Bayer is an efficacious antipyretic.
2. It does not develop any disagreeable or noxious after effects.
3. The dose required is half that of Antipyrine.
4. It is perfectly tasteless.
5. On account of its innocuousness and tastelessness, it is a valuable antipyretic both in adults and in children.
6. Phenacetine-Bayer is an important antineuralgic; its effect is more energetic than that of Antipyrine and does not cause lassitude or any other disagreeable symptoms.

Our Pamphlet on Phenacetine-Bayer, containing the valuable testimony of eminent physicians will be mailed on application.

We offer Phenacetine-Bayer in one-ounce vials, or in the form of our Soluble Pills of the strength of two and four grains to each pill.

W. H. SCHIEFFELIN & CO.,
170 & 172 WILLIAM STREET, NEW YORK.

Sole Licensees and Sole Agents for the United States.

Please mention the MEDICAL DIGEST.

CONSTITUTIONAL DISEASES.

Hypodermic Injections of Quinine in Malaria.

DR. J. A. CORREA DE CARVALHO, of Extremoz (Portugal), has recently recorded a case of malaria, which he succeeded in curing by hypodermic injections of quinine.

The patient was a woman, aged 35, in whom the disease had reached the cachectic stage. The skin and mucous membranes were discolored, and the spleen, which was very tender on pressure, reached down to the left iliac fossa, and extended towards the right to within two or three centimetres of the middle line. The stomach was dilated, and the patient suffered much from dyspepsia. The temperature varied from 39.8° C in the morning to 38.8° in the evening. Sulphate of quinine was given internally in capsules and in pills, but only with the effect of aggravating the gastric disorder.

On November 18 hypodermic injections of neutral hydrochlorate of quinine were commenced, at first in doses of 4, and afterwards 5, decigrammes. The temperature soon began to fall even in the morning, and by the middle of December it was normal, never exceeding 37.5° in the evening, and being sometimes below 37° in the morning.

On January 13 the patient was discharged cured, the spleen being much reduced in size and not at all tender, and the discoloration of the skin and mucous membranes having almost entirely disappeared. Her dyspepsia had also ceased to trouble her. The injections, which were all made under the skin of the forearm, caused a little irritation. A few small abscesses formed around some of the points of puncture, and had to be opened, but gave no further trouble.

The following is the formula of the solution used for injection: \mathcal{R} Basic hydrochlorate of quinine, 1 gramme; pure hydrochloric acid, m i; distilled water, 2 grammes. These ingredients should be placed in a test tube, and exposed to the action of gentle heat. A clear solution will be obtained, each cubic centimetre of which will contain five decigrammes of neutral hydrochlorate of quinine. The solution should be injected warm.

Dr. A. Rocha first recommended this method, which he had employed successfully in a patient suffering from malaria, to whom it was found impossible to give quinine in any other way. Drs. Beurmann and Villejean had independently described a somewhat similar method.—*British Medical Journal*.

Pastils for Fetid Breath.

\mathcal{R} .—Ground roast coffee, 75 grams.; pulv. charcoal, 25 grams.; pulv. boracic acid, 25 grams.; saccharine, 0 gram. 65 centigr.; tinct. vanilla, q. s.; gum mucilage, q. s. Make into pastils of 0 gram. 70 centigr.—*American Druggist*.

When to Administer Drugs.

Alkalies should be taken before meals.

Iodine and its preparations should be administered upon an empty stomach, because then they are more rapidly extended through the circulation. During digestion they are altered by the acids and starchy substances, and are thus weakened in action.

Acids should be generally given in the intervals between digestion, as the mucous coat of the stomach is then in the most favorable condition for their diffusion into the blood; in cases of excessive acidity of the gastric juice they should be prescribed before meals.

Irritating and dangerous medicines ought to be taken after meals (arsenic,

copper, zinc, iron, etc.), nitrate of silver before meals.

The metallic salts, particularly corrosive sublimate as well as tannin and alcohol ought to enter the stomach when in a state of inactivity.

Phosphates, cod-liver oil, malt extracts, should be ordered after meals, so as to become mingled with the other products of digestion.—*Journal de Méd.*
—*Medical Register.*

Anæmia.

FOR a girl with anæmia, in which the red corpuscles were found to be diminished nearly one-third in number, DA COSTA directed a meat diet, 3 grs. sacch. pepsin at meals, and the following: ℞.—Liquor potassii arsen. ℥iij; tinct. cinch. comp., f 3 j. M. Sig. 3 times a day.—*Med. & Surg. Reporter.*

Treatment of Purulent Pleurisy by Frequent Punctures at Short Intervals.

PROFESSOR DESPLATS, of the Lille School of Medicine, advocates this plan in preference to drainage through a permanent opening. The following are his conclusions:

1. When you suspect a purulent effusion do not wait, but make at once one, two, three exploratory punctures.
2. If the exploratory puncture reveals the presence of pus, evacuate immediately.
3. Having evacuated the pus, you ought to prevent a new collection by puncturing as often as is necessary, and at frequent intervals, without fearing white punctures. This practice has the advantage of preventing the effects of the accumulation of pus and of favoring the reunion of the walls of the pouch. If, later on, pleurotomy is necessary, you will not open the pleural cavity, but an encysted pouch.
4. If the punctures do not suffice, or

if they should have to be repeated too often, introduce a permanent siphon, avoiding the introduction of air.

5. Finally, if you meet with a septic centre for the disease which the early punctures do not modify, if, above all, the pus has a gangrenous odor, open freely without waiting. In such a case only will you wash out the cavity with antiseptic lotions.—*Le Scalpel.*

Sun Stroke.

THE proper thing to do for a case of sunstroke or heat exhaustion is to remove or loosen clothing about the neck; do not move unless hospital is near; throw buckets of water upon patient, or, what is better, rub down with ice. Get the bowels open; turpentine injections or croton oil if not too much exhausted, or inject cold water, or one-half dram of glycerine, into rectum. For the stroke, draw blood if pulse is full and strong. Antipyrin is of great value, not only the immediate but subsequent result good. When he commences to recover, allow a bland diet. As one attack predisposes to another, patient should be careful in hot weather; go to mountains, if possible; keep the bowels open. To control convulsions, use morphine hypodermatically, or inhalation of small amount of chloroform.—*Coll. and Clin. Record.*

Diphtheria Affecting First the Perineal Region.

AT a recent meeting of the Harveian Society of London, Dr. HILL (*British Medical Journal*), related two very interesting cases in which the poison of diphtheria seemed to enter the body from a water closet and through the perineal region.

The outbreak of the disease was sporadic, limited to one house. The house, among other defects, had a water

closet with untrapped soil-pipe. Three persons used this closet, and all had diphtheria. The first, a little boy of 10 years, died with diphtheria of the throat. The second, the father of the boy, who had frequently suffered from an eczematous patch over the coccyx, noticed that this area became very painful and very much inflamed; later, putrid pieces of skin and slough came away for two or three weeks on the poultices which were applied. The gluteal lymphatics became enlarged, and formed two boils one on each side of the groove of the buttocks. The patient suffered great pain especially in defæcation. He never had sore throat. Six weeks after the appearance he had paralysis, believed to be the result of diphtheria, which disappeared after the application of electricity, and a sea voyage. When the sores of this patient had healed, his daughter, eight years of age, began to complain of frequent and painful micturition. Upon examination her vulva was found to be swollen and œdematous, and there were several small sores and patches on the labia.

Diphtheritic membrane formed on the tonsils and extended to the lungs. Before death, which occurred on the eighth day, perforation of the recto-vaginal walls was observed, being indicated by the escape of fæces through the vagina. These cases go to prove the need of careful disinfection of the discharges of diphtheritic patients, and the danger of untrapped, filthy water closets.—*Medical and Surgical Reporter*.

Anæmia.

AN analysis of one hundred cases of anæmia has been made by Dr. HENRY CONKLING (*Brooklyn Medical Journal*). He assumes that anæmia is a special disease, and that there is a wide difference between anæmia the disease and

the so-called anæmic state. From the analysis he has made he draws the following conclusions: 1. Anæmia is a special disease. 2. It is nervous in origin, blood poisoning resulting. 3. It occurs most frequently in young unmarried females. 4. It is more severe when present in males. 5. The majority of the patients are without grave antecedent disease. 6. When treated it lasts from six weeks to six months. 7. It is not succeeded by acute or chronic diseases. 8. Under certain conditions it may develop abnormal structural tissue change. 9. It responds well to treatment.

Tubercular Peritonitis.

FOR a case of tubercular peritonitis, Professor DA COSTA directed inunctions of cod-liver oil and—℞. Syr. ferri iodidi, gtt. xx; morph. sulph., gr. $\frac{1}{8}$. M. Sig.—Ter die.

Also—℞. Cocain. hydrochlorat., ℥; unguent belladon., $\frac{5}{8}$ j. M. Sig. Apply to the abdomen.—*Coll. and Clin. Record*.

Acute Pancreatitis.

DR. REGINALD H. FITZ lately delivered a very interesting lecture upon the above subject, and his conclusions are as follows, he believing that the evidence he has presented is intended to establish the fact that: Acute inflammation of the pancreas is both a well characterized disease, and one which is much more frequent than is generally thought. It is of great consequence that it should be recognized, for the following reasons. It represents a serious complication of what, by itself, is a relatively simple affection, viz., gastroduodenitis. It is an important cause of peritonitis, and one readily overlooked. It has been repeatedly confounded with acute, intestinal obstruction, and has thus led, in several instances, to an ineffective lapa-

rotomy; an operation which in the early stages of this disease, is very hazardous. *St. Louis Med. and Surg. Journal.*

Colds and Clothing.

THE teaching of modern science and of ancient custom goes to show that heat production within the body has much to do with the tissue changes concerned in muscular activity and with healthy digestion. It is conserved by warm and moderate, wasted in evaporation by excessive clothing. Finally, by a simple nervous reaction, it is increased after the contact of external cold. It follows from these observations that, if we be so clad with comfortable under clothing that surface perspiration is not formed in excess and is rapidly removed, one great chill—sudden evaporation—is done away with. Outer cold, then, provided it is not too severe, only touches, as it were, the spring of the heat making metabolism, and, exciting an elastic rebound in the chain of vaso-motor fibres, awakens that oxidative action by which every tissue is made to yield its share of heat to the body. This bracing influence is lost wholly or partly to those who are too heavily clothed, and in its place we may have a dangerous excess of surface heat. It is for this reason that we have before protested, as we now do, against the indiscriminate use of the thick and heavy overcoat. We would rather see men in fairly robust condition, especially if young, clad warmly next the skin, and wearing either a light top coat or none at all. There can be no doubt that the habitual use of great coats is directly accountable for the chills which they are intended to prevent. Were the overcoat worn continually it might attain its object. Its intermittent use, even when ample underclothing is worn, affords no solid guarantee of safety,

but rather the reverse. The man of sedentary habits has especial need to remember this. He emerges daily from a warm breakfast room clothed in his ordinary winter garments, with probably woollen underwear, and over all the heavy ulster or top coat. After a short walk he finds that the sense of warmth he began with is more than maintained. He arrives at his office or place of business, and off goes the overcoat, though the air of the newly opened room is as cold as that without, and draughty in addition. During the day, perhaps, he travels to and from adjacent business houses wearing only his house clothing. The overcoat is laid aside till closing time reminds him of the journey home. The frequent result is that somehow between the hours of his departure and return he is chilled. No doubt he would run as great a risk if, lightly clad, he were to face the rigor of a winter day. In this case, however, exercise and habit might do much to develop the power of endurance, and there would, at all events, be less danger of sudden cold acting upon a freely perspiring surface. Woollen underclothing represents a state of healthy comfort intermediate between these extremes, and more resistant to chill than either. In commending its use, however, we do not assert that the influence of age and constitution is to be overlooked. Youth can oppose a power of resistance to depressing agencies which does not reside in the worn out nerve centres of a riper age. Similarly, that elastic reaction which characterizes the nervous and sanguine types is not to be looked for in the lax tissues of the lymphatic. The weaker physique naturally calls for fuller protection than the stronger; and any rule requiring the disuse of the overcoat should allow of reasonable exceptions in favor of the

old and constitutionally feeble. Unusual severity of weather, especially if associated with night air and the loss of sleep which this implies, is another condition which might well constitute an exception. In such a case we are compelled to add some form of overcoat to the ordinary amount of clothing. Some parts of the body—for example, the chest, throat and feet—are certainly more susceptible to cold than others. As a useful safeguard, cold or tepid bathing of such parts is in merited favor. The custom so common with many persons, especially women, of walking out in thin soled boots often plays an important part in catching cold. The progress of time and of rational thought may be expected to bring a more comfortable arrangement by clothing the foot in woollen hosiery and a stouter boot.—*The Lancet*.

DISEASES OF THE NERVOUS SYSTEM.

The Thermo-polypnœic Centre and Thermotaxis.

DR. ISAAC OTT, of Easton, Pa., read a paper upon this subject, the following being his conclusions from sixty experiments:

1. The thermo-polypnœic centre is situated in the gray matter about the third ventricle at its anterior part.
2. This centre acts reflexly, so that when heat is thrown on the body the sensory impulses excited by the heat are conveyed to the polypnœic centre, which excites the respiratory centre to throw off the heat. It stands between heat production on one side and heat dissipation on the other.
3. The fall of the number of respirations caused by the heat after the removal of the polypnœic centre is due to an excitation of fibres running in the vagi which inhibit the respiratory centre.

4. The normal temperature of the body is not necessarily dependent upon the amount of heat produced or dissipated, for human calorimetry shows that the heat production varies, but the temperature remains nearly the same. The relation of heat production to heat dissipation decides the temperature.

5. The cortical centres, the cruciate and Sylvian, are thermotaxis.

6. The four basal thermotaxis centres are situated as follows: One in the caudate nucleus, one in the gray matter beneath the caudate nucleus, another in the gray matter about the most anterior part of the third ventricle, and still another in the anterior inner end of the optic thalamus in the gray matter about the third ventricle.

7. These six thermotaxis centres are more circumscribed than Gerard, of Geneva, believes.

8. These six thermotaxis centres are neither thermo-inhibitory nor thermo-excitor, but thermotaxis; that is, they maintain the balance between heat production and heat dissipation, so that the temperature is kept normal.

9. In fever neither increased production nor increased dissipation, nor high temperature is necessary, but fever is mainly a disease of thermotaxis, a disorder of the four basal thermotaxis centres. It is true that in septic fever, in its initial stage, heat production usually runs temporarily ahead of heat dissipation, but exceptionally both are immediately diminished.

10. Antipyretics do not necessarily inhibit or excite heat production or heat dissipation, but act upon the thermotaxis centres disordered by fever as agents to restore order or normal thermotaxis. Professor Chittenden's careful researches prove that in healthy hungry rabbits moderate doses of quinine exercise at most only a very slight depress-

ing influence on the temperature and have but a minimum effect upon the production of carbonic acid.

11. D'Arsonval's calorimeter for animals and man as modified by the writer is less liable to error than any other, as the agitator can be worked without opening the instrument or with hardly disturbing the sawdust covering.

12. Human calorimetry shows that an adult after a full meal produces between 300 and 400 heat units an hour, and not 110 calorics, as Helmholtz theoretically obtained.

Dr. Dana did not question the truth of the author's statements. But what interpretation should be made of the six thermotaxic centres he had described? Could the bodily temperature be regulated without them at all? He referred to a case of his that he had recently reported in which, although there was no cerebrum, basal ganglia, or cerebellum, and only part of the pons, yet the temperature was normal. The facts of human pathology should be brought into harmony with these physiological experiments.

Dr. Ott said it was difficult to understand the regulation of temperature in Dr. Dana's monster. Injuries to the corpus striatum disturbed the temperature, but the other thermotaxic centres regulated it.—*N. Y. Med. Journal*.

Watery Dilution of the Bromides in Epilepsy.

SINCE HUGHES (*Med. Standard*) first began prescribing the bromides in epilepsy, he has been in the habit of ordering that each dose be taken in a glass of water or milk. This obviates gastric irritability, promotes rapid absorption, and prevents undue concentration of the blood, a determining factor in the production of the epileptic paroxysm. Novi showed that spasm of the vessels, due to

cerebral stimulation, resulted when the density of the blood became double that of the normal, a state brought about by the intra-venous injection of a ten per cent. salt solution. Hughes believes that the above physiological fact may aid in the explanation and treatment of idiopathic epilepsy and of eclampsia. The influence of warm baths, of enemata and of copious draughts of warm water, over infantile convulsions, Hughes thinks would thus seem to find a rational explanation. He regards it probable "that the thickening of the blood, drained of the serum, has the same effect upon the motor centres of the muscles as sudden anæmia and withdrawal of arteria and arteriole pressure, such as is displayed in the convulsions of decapitated animals and in the cadaveric rigidity which appears when the blood forsakes the arterial channel for the venous." Dilution of the remedies given in epilepsy would seem to be indicated to thin the blood, and diminish vaso-motor irritability, and consequent tendency to vascular spasm.

Da Costa on Sciatica.

PROFESSOR DA COSTA prescribed for an obstinate case of sciatica in an anæmic subject: *R. Syrup. ferri iodidi*, f 3 j. *Sig.*—Take three times daily.

He also directed: *R. Morphine sulph.*, gr. $\frac{1}{4}$; *atropine sulph.*, gr., $\frac{1}{8}$. *M. Sig.* Hypodermatically morning and evening, in neighborhood of the nerve; massage to the limb, it being wasted.

Use of Hypnotics, Sedatives, and Motor Depressants in the Treatment of Mental Diseases.

DR. T. S. CLOUSTON (*American Journal of Medical Science*):

The author arrives at the following rules for the application of these agents:

1. Make up your mind clearly from the symptoms present whether your patient needs a pure hypnotic, a general nervous sedative, or a simple motor depressant before you use any of these drugs.

2. Use all such drugs experimentally in each case at first, and watch their effects not only on the higher nervous functions, but on all the organs and their functions, and on the general organism.

3. Even when there is sleep and quiet produced for the time with no apparently bad results, look to the general feeling of *bien-être*, the recuperative energy, the expression of face and eyes after their use, and see if there is any undue reaction, as if some energy that must have an "outlet" were merely being "suppressed" for the time being.

4. Stop using such drugs as soon as possible, trying experimentally how the patient gets on without them.

5. Keep asking in every case: Are we sacrificing in any degree the highest functions of mental inhibition by their use?

6. Never omit general measures for the restoration of the health, nutrition, and higher nervous functions while you use such remedies.

7. Paraldehyde is the purest and least harmful hypnotic yet introduced when the insomnia is marked and intractable. Urethan and sulphonal cannot compare with it. Opium and chloral have special dangers and disadvantages.

8. Use the bromides as accentuators and prolongers of the effects of other drugs, and in order to be able to employ smaller doses than otherwise.

9. A combination of cannabis Indica and the bromides is the best and least harmful of general sedatives.

10. Hyoscine is the best pure motor depressant; but it needs care.

11. We never should narcotize an insane patient, or one threatened with mental disease.

12. It is as dangerous to use more anodynes by the mouth or subcutaneously to relieve mental pain, as to subdue bodily pain by these means only, perhaps more so.

13. It is generally far better therapeutics to enable your patient to bear his mental pain and the effects of his insomnia by improving his general nervous tone and the nutrition of his body, than merely to produce quiet and sleep by drugs.

14. It is commonly a safer thing for the patients, and tends more toward natural recovery from his disease, to provide a physiological outlet for morbid motor energy than merely to depress it directly by drugs.

15. It is almost always preferable to treat cortical exhaustion, irritability, and undue reflex excitability by rest, and by improving the fattening and nutrition of the body, than by continuous sedatives, the great exceptions being the treatment of epilepsy and convulsive affections by the bromides.

The Suspension Treatment of Locomotor Ataxia.

THIS method of treatment of posterior spinal sclerosis was first brought to the attention of the profession by Dr. MOTCHOWKOWSKY, of Odessa. During the past year, M. Raymond and Dr. Onanoff while travelling together in Russia saw some of the results which had been obtained by Dr. Motchowkowsky, and upon their return to Paris M. Raymond instituted some experiments in this direction in his own clinic, with the assistance of his *chef*, M. Gilles de la Tourette. The discoverer of the method had used it in twelve cases of locomotor ataxia with benefit, and in a

number of cases of impotence had restored sexual powers in the same manner. The *modus operandi* is merely the suspension of the patient by means of Sayre's apparatus every other day, beginning with one-half a minute and gradually increasing to four minutes. Every fifteen to twenty seconds the arms are elevated in order to increase the traction upon the cord. Professor Charcot has treated eighteen cases in this way, involving four hundred suspension séances, and corroborates all that had been previously stated with regard to its efficiency. Fourteen of the cases were markedly benefited. Improvement began immediately. The ataxia was diminished, and after twenty to thirty suspensions Romberg's symptom disappeared in most of them. Micturition became more regular and easy. Incontinence diminished or entirely disappeared. The lightning pains became fewer or completely vanished. Sexual desire and erections succeeded to impotency. Numbness in the feet disappeared. In none of the patients were the patellar reflex and eye functions restored. MM. Charcot and Blocq have tried suspension in other cases than ataxia with good results. Extraordinary improvement took place in a girl with Friedreich's disease, and the sexual functions were restored in two neurasthenic and impotent patients. A case of disseminated sclerosis treated in this way became afflicted with a temporary spasmodic paraplegia after two suspensions.—*Medical Press and Circular*.—*Medical Analectic*.

Treatment of Insomnia.

DR. W. H. THOMPSON, of the New York Hospital (*Medical and Surgical Reporter*) prescribes as follows in insomnia due to worry or mental strain. This variety he considers most danger-

ous as it may lead to epilepsy or insanity. R̄. Acid hydrocyanic dil., gtt xvi; sol. morphin. Magendies, 3 j; chloral hydrat., 3 jss; syr. zingiberis, 3 j; aquæ camphoræ, ad. 3 vi. M. Fiat sol. Sig.: Dose, for ordinary case, a tablespoonful; for severe case, two tablespoonfuls.

This prescription is also good for the sleeplessness of fatigue.—*St. Louis Medical and Surgical Journal*.

The Influence of Excitations of the Brain on the Principal Organic Functions.

M. FRANÇOIS-FRANCK (*Gaz. Hebdom. de Méd. et de Chirur.*) states that according to Damlewsky and Ch. Richet, excitation of the brain produces a lowering of the respiration or stops it altogether; according to Lépine and Bochefontaine, it is an irregularity and an acceleration of the respiratory movements that is observed. Some authors deny the localization of cortical respiratory centres; others—Christiani, Newell Martin, and Booker—maintain the existence of inspiratory and expiratory centres.

The author studied experimentally not only the modification of the respiratory rhythm following simple cortical excitations, but the different details which accompany the respiratory phenomena, and also the respiratory changes following upon artificially provoked epileptoid attacks. The results may be formulated as follows:

- (A) 1. The excitation of the motor zones provokes a simple, not epileptoid, modification of the respiratory function.
2. Other parts of the cerebral cortex, on being stimulated, do not act like this, unless there is a diffusion of the excitation toward the motor zones.
3. The respiratory effects consist in a change of their frequency; there is no relation between the regions of the motor zones excited and the acceleration

or diminution of the respiratory movements; the diminution of the movements seems to be in relation with the degree of intensity of the excitation.

4. The respiratory effects consist also in a change of the amplitude of the movements; the former may vary with the frequency of the respiratory movements.

5. The thoracic walls assume the inspiratory position, dilate; the respiratory amplitude is then at its maximum, and the average pleural aspiration is exaggerated. It happens also that the expiratory attitude is assumed by the thoracic walls; then the amplitude of movements decreases, and the average pleural aspiration diminishes.

6. The elastic bronchi contract energetically, and the lungs resist to insufflation more than they do in curarized animals.

7. The glottis enlarges when there is a tendency to inspiration, and contracts in the opposite conditions. It was impossible to induce spasm of the glottis artificially during the inspiratory period.

8. It follows that there is no cortical centre in connection with the glottis, which was considered to exist by Krause, Lannois, and Delavan.

9. The cortical motor zones have no special centres for the thoraco-abdominal respiration.

(B) 1. In partial artificially provoked epileptoid attacks the respiration is never suspended, even during the tonic phase of the localized attack, but becomes more frequent and is of augmented amplitude; the thorax assumes an expiratory position.

2. The respiratory embarrassment during the tonic phase of a generalized fit is expressed by the participation of the thoraco-abdominal walls in the general contractions, by the immobility and rigidity of the walls, as well as by the

closure of the glottis; with the addition of general muscular contractions, asphyxia is necessarily induced, which causes retardation of the heart and vascular spasms. It happens that the respiratory apparatus shows some spasmodic contractions at the time of absolute tetanus of the rest of the parts of the body.

3. During a clonic attack the irregular respiration is moderately maintained, which suffices for the non-occurrence of asphyxia; the respiration is suspended, however, when the thoraco-abdominal muscles make exception to the general convulsive shocks, and enter upon a state of tetanus.

4. During a general tonico-clonic attack the larynx presents the following conditions: *a.* The lips of the glottis separate and approach alternately with the same rapidity that the movements of the inspiratory and expiratory muscles present. Never is the glottic occlusion complete, and a sufficient current of the tracheal air through the glottis persists. *b.* During a general tonic attack the occlusion of the glottis is complete, the tracheal current is abolished, and the laryngeal muscles contract in a manner similar to the contractions of the rest of the respiratory muscles. *c.* In the clonic phase the glottidean lips relax and approach under the influence of the nervous discharge, which acts alternately on the lateral and posterior crico-arytænoids; these alternate movements are of the same rapidity as the shocks of the affected thoracic muscles; a comparative graphic examination shows a synchronism of the laryngeal and respiratory muscular shocks. The author has followed out the influence of simple and epileptoid cerebral excitation on the circulatory apparatus, and states that experimenters have usually used curarized animals to avoid volun-

tary movements, and this has misled them into giving false statements as regards the different vital phenomena which occurred in each individual case: for a curarized animal is in a state of internal or marked epilepsy, and simple and epileptoid fits provoked by cortical excitations are characterized by different vital manifestations.

The author's conclusions may be formulated as follows :

(A) 1. The circulatory modifications which accompany complete epileptoid convulsions, tonico-clonic, produced by cortical excitations, are expressed by slowing of the heart during the general tonic phase, and acceleration during the clonic convulsions. The vascular tension should be increased during the general tetanus and vascular spasm, but the slowing of the heart dominates over the tension by slowing it, while in the clonic period the tension is considerably increased.

2. The circulatory and vascular trouble in an incomplete clonic attack presents the same features as in the clonic stage.

3. In abnormal attacks, where a tonic attack occurs between two clonic, each phase presents the features enunciated above as characteristic of each individual attack.

4. A current of considerable intensity applied to a curarized animal brings the latter into a stage of a marked epileptic attack, or internal epilepsy ; and the circulatory troubles correspond to the rules given above. The author was guided in identifying the statements by the pupillary dilations, by curarizing an animal so as to avoid the poisoning of one of its limbs, and by this means he was enabled to follow out the manifestations.

(B) 1. As regards the vascular and cardiac effects in provoked epilepsy, the

vascular spasm is a rule for all forms and phases of attacks ; there is an independence between the cardiac and vascular phenomena, an augmented vascular pressure occurring during a tonic fit, etc. ; the dependence of the vascular and cardiac phenomena referred to above is true only of the terminal periods of attacks.

2. As regards the vaso-motor effects of simple, non-epileptic origin, the vaso-constrictor phenomena only were observed ; the vaso-dilator occurred in insufficient manner to deduce conclusions. The vascular constriction is at its maximum when the marginal convolution is stimulated. The vascular reaction produced by the stimulation of any region in the cortex is a general one ; it is no more marked even in the parts which depend functionally upon the cerebral region excited than in other parts. The true vaso-motor centres are situated in the medulla, and they only receive cerebral as well as peripheral incitations.

3. The experiments of the cardiac effects of simple, not epileptic, nature consequent upon cortical excitation, lead the author to deny the existence of cortical centres regulating the heart, for, regardless of the area excited, there occurs either acceleration or depression of the heart in a regular manner, but which can not be predicted ; the excitable cerebral surface behaves as a sensory surface toward the cardiac reactions as well as to other organic reactions.

(C) 1. Bilateral pupillary dilation, which may be partial sometimes, insensibility of the iris to light, projection forward and fixation of the ocular globes. divergence of the eyelids, congestion of the fundus of the eyes and conjunctiva is the rule for epileptoid attacks of cortical origin, however insignificant the attack may be. In

localized attacks, even those affecting the face, the pupillary dilatation is absent, or at least not much marked. The pupillary symptoms are independent of the form of the attacks, the character of the heart work, and the existence or non-existence of vascular spasms. The pupils dilate in the beginning of the attack, soon reach their maximum dilatation, and become normal with the cessation of the attack. The pupillary effects are bilateral as a rule, but sometimes only the pupil opposite to the hemisphere excited is affected.

2. In the case of organic or internal epilepsy, produced by cerebral excitation of a curarized animal, the pupils give the same features as those referred to, corresponding to the manifestation of the internal epileptoid attacks.

3. The simple non-epileptic pupillary modifications produced by cerebral stimulation are contractions.

4. There is no localized centre for a special pupillary function.

DIGESTIVE TRACT.

Treatment of Tapeworm.

BÉRENGER-FÉRAND has communicated to the *Bulletin Général de Thérapeutique*, an article in which he sums up cases of tapeworm,—in all one hundred and ninety-one patients—at the Maritime Hospital of Toulon during the year 1888, and the results of treatment.

Of these 191 patients treated for tapeworm 112 were discharged cured, the worm being expelled head and all; in every instance the *tænia* was of the variety known as *Tænia inermis*. In 87 instances but one parasite was found; in 11 there were two; in four there were three; in one there were five; in two there were six; and in one unparalleled case seventeen heads were counted as the result of an anthelmintic.

As for the time during which these patients had been afflicted with the parasite, four had carried their *tæniæ* for three years; two for eight years; and one for eleven years.

As regards the treatment, Bérenger-Férand still gives the preference to pelletierine. This tænicide, which is the active principle of pomegranate bark, is by far the most successful of all remedies used. During the year 1888 pelletierine was employed one hundred and fifty-two times as a tænifuge at the Toulon Hospital. Of these cases one hundred and ten were successful, forty-two were unsuccessful, giving 72 per cent. of recoveries.

As for the manner of administration of the remedy, the patient takes nothing but bread and milk for supper the evening before; the next morning thirty centigrammes (five grains) of the sulphates of pelletierine and isopelletierine are administered in solution with fifty centigrammes (8 grains) of tannin (or half a bottle of Tanret's solution of the mixed pelletierines, the other half to be given in an hour); from 7.30 A. M. to 8 A. M. a full dose of a tablespoonful of the German tincture of jalap is given, or from an ounce to an ounce and a half of castor oil. A few hours after the ingestion of the medicine the patient experiences a slight vertigo, and the tapeworm is voided, as a rule, four hours after the dose is taken. In order to avoid breaking of the worm during its passage, and before the head is voided it is advised that the patient shall sit at stool in a vessel nearly full of warm water. Bérenger-Férand has lately resorted to injections of a decoction of pomegranate bark to assist the expulsion of the worm, and claims that this is an improvement in the treatment.

It is needless to say that the above is now the favorite treatment of *tænia* in

France, and Dujardin-Beaumetz affirms that "since we have established these rules of treatment, and wherever patients have scrupulously complied with them, we have had numerous successes, and in nine cases out of ten we obtain the worm with the head."

Béranger-Férand finds in his last year's experience in the treatment of this painful malady gratifying confirmation of the results obtained in past years.—*Boston Med. and Surg. Journal*.

Ball's Purgative Pills.

DR. BALL, the alienist of Saint Anne, of Paris, frequently orders the following: \mathcal{R} . Aloes socotrin, gr. xv., resin scammon, resin jalap, āā gr. vijss; hydrag. chlorid. mit., gr. v. ext. belladonnæ; ext. hyoscyami, āā gr. iv; sapo. amygdal, q. s. \mathcal{M} . Fiat massa et divide in pil. No. 50. Sig. Take three to five pills daily.

Hæmatemesis.

IN the treatment of hæmatemesis from any cause, Professor DA COSTA advises rest in bed, no food or drink by the stomach except small quantities of iced liquid or cracked ice. Nourish entirely by the rectum. Also acetate of lead, 2 grs. every four hours, guarded by a small quantity of opium, or 1 to 2 drops Monsel's solution every four hours.—*Coll. and Clin. Record*.

Gall Stones.

IN the case of a woman who had passed gall stones, Professor BARTHOLOW directed $\frac{1}{20}$ gr. arseniate of sodium ter die, and— \mathcal{R} . Sodii phosphat., sodii sulph., āā 3 ss. \mathcal{M} . Sig. Ter die in hot water.—*Ibid*.

Internal Hemorrhoids.

IN the treatment of internal hemorrhoids (Professor GROSS), stretch the

sphincter to allow them to come down, then grasp each pile separately and apply a silk ligature to its base.—*Ibid*.

Tonic Pills.

A USEFUL pill in certain atonic conditions of the stomach and bowels is the following: \mathcal{R} . Extract. ignatiæ amaræ, gr. iv; extract. gentianæ, gr. xxx; capsici pulv., 3 j. \mathcal{M} . Fiat pil., xxx. Sig.—One after each meal.—*Ibid*.

Constipation.

THE following prescription for constipation is found in *Lilly's Bulletin*: \mathcal{R} . Podophyllin.; extract. belladonnæ, āā gr. $\frac{1}{10}$; extract. nucis vomicæ; extract. hyoscyami; capsici pulv., āā gr. $\frac{1}{4}$. \mathcal{M} .

The Treatment of Chronic Dysentery by Enemata.

BELLEDI sums up a series of articles on this subject with the following observations: 1. The symptoms of chronic dysentery do not depend so much on the site and extent of the local lesions as on the effect they produce on the rest of the digestive tract. This is influenced largely by the general state of health of the individual, so that two persons with nearly identical lesions in the colon may have symptoms of varying degrees of severity. 2. In the dysentery of warm climates, the lesions in the colon are often so extensive as necessarily to require a considerable length of time for their repair. 3. Enemata when long continued have grave disadvantages. The daily distension of the colon stimulates the rest of the digestive tract, and causes imperfectly digested food to be hurried into the large intestine, which it irritates, and so aggravates the disease. And the daily distension of the colon when long continued, tends to lessen the normal contractility of the coats of the bowel necessary for the perform

ance of its proper functions. Enemata, therefore, are valuable in slight and easily repairable lesions of the colon; but in the more severe cases other measures must be adopted, such as carlsbad water taken on rising in the morning.—*London Medical Record.*

Tonic Pill.

THE following is an excellent tonic pill: \mathcal{R} . Ferri carbonat., gr. ij; quiniæ sulphat., gr. j; acid, arsenios; strychniæ sulphat., āā , gr. $\frac{1}{30}$. M. Sig.—To be taken three times daily.

Chloroform in Dyspepsia.

CHLOROFORM administered in the various forms of dyspepsia overcomes fermentation and flatulence; it is best given in one of the following formulas:

1. Method of Dr. WILS.—From ten to twenty drops of chloroform, to be taken in a few spoonfuls of sweetened water, in flatulent dyspepsia. After a few minutes eructations occur, followed by improvement.

2. Method of Dr. HUCHARD.—Administer before each meal one dessertspoonful of the following: \mathcal{R} . Chloroform water, 150 parts; mint water, 30 parts; water, 120 parts. M.

Or, from eight to ten drops of the following mixture in a wine-glass of water: \mathcal{R} . Tincture of nuc. vomica, tincture of gentian, tincture of anise, āā 3j.; chloroform, gtt. xx-xl. M. An appropriate diet and oxygenated waters at meal times form part of this treatment.

3. Methods of Drs. REGNAULT and LASEQUE.—This treatment applies particularly to painful dyspepsias with dilatation of the stomach: \mathcal{R} . Chloroform water, 150 parts; orange flower water, 50 parts; water, 100 parts. M. One dessertspoonful to be taken every fifteen minutes, until the pain ceases.

Or the following for the same affections: \mathcal{R} . Chloroform water, 150 parts; tinct. anise, 5 parts; water, 145 parts. M.—*Revue Gén. de Clin. et de Thérap.*

DISEASES OF RESPIRATORY ORGANS.

Lactic Acid in Laryngeal Phthisis.

DR. WLADISLAW OLTUSZEWSKI states (*Wiadomosci Lekarskie*) that having extensively tried Herring's method of treatment of laryngeal phthisis by painting with a from 10 to 15 per cent. solution of lactic acid, he has arrived at the following conclusions: 1. Lactic acid acts most rapidly in cases where ulcers are situated about the epiglottis and vocal cords (that is, in the most accessible regions). Superficial ulcers in said regions are healed completely after a few applications. 2. When the posterior wall of the larynx is affected, the remedy acts much more slowly, but even here a cure may sometimes be obtained, especially when the lesions involve only superficial structures. 3. The paintings relieve both primary and secondary œdematous swelling of the parts; the primary œdema, however, yields less rapidly than the secondary. 4. They alleviate swallowing and improve the patient's voice. 5. If abundant granulations are present, chromic acid or a sharp spoon should be resorted to before the lactic acid treatment. The latter remains inactive in respect to connective tissue outgrowths. 6. Cicatrization of ulcers takes place without the formation of any sloughs. 7. On the whole, the results of the treatment are dependent upon the depth of the ulcers.—*St. Louis Med. & Surg. Jour.*

Fetid Bronchitis.

IN the treatment of fetid bronchitis, Professor DA COSTA recommends full support, cod liver oil and carbolic acid, both by inhalation and internally.

Bacilli of Tubercle.

PROFESSOR DA COSTA regards the examination for bacilli of tubercle of the highest diagnostic value in the recognition of phthisis.—*Coll. & Clin. Record.*

The Hot Air Cure for Phthisis.

DR. A. L. STEARNE exhibited the apparatus devised by Weigert for heating the inspired air, and gave an account of the results which followed its use by consumptives. It consisted of a stand, supporting a double cylinder, which was covered with asbestos. The interior of the inner cylinder was heated with a Bunsen burner, so that pure air drawn in between the two cylinders became heated and at the same time disinfected. At the outset of treatment patients were made to inhale air at a temperature of 212° F. for thirty minutes. Gradually the sitting was prolonged to two hours, both morning and evening, and the temperature of the air was slowly increased to the highest point each patient could endure without discomfort; the maximum reached in any case had been 482° .

The chief results were the following:

1. The pulse, at first faster, became slower as the inspirations continued, and the respirations became deeper.
2. The body temperature rose at first one or two degrees, but in the course of an hour sank to normal, the exhaled air having a minimum temperature of 113° F.
3. While the general health remained undisturbed, the difficulty in breathing was at once removed; there was lessening and finally cessation of cough, fever, and night sweats and the appetite and strength improved. The disease in time came to an end, in fact, the hemorrhages, catarrhal lesions, infiltrations, and the dilatations of the bronchi all being put a stop to; cavities underwent

cicatrization; the weight increased rapidly, especially where emaciation had been extreme; and the bacilli slowly disappeared from the sputa, sometimes in as short a time as fourteen months.—*N. Y. Medical Journal.*

Simple Non-tubercular, Non-metastatic Abscess of the Lungs.

DR. S. S. JONES read a paper with this title. He called attention to the fact that there was nothing in the text books which took account of the occurrence of this lesion. The lung was peculiarly prone to inflammation, but could easily discharge the products through the bronchi, so that a small abscess might easily run its course without attracting notice. There were four forms which the disease might take:

1. The condition might remain obscure from the beginning, and give no manifestation of its presence until the discharge of pus, or the appearance of evidences pointing to a cavity.
2. It might give rise to symptoms simulating pleurisy, with effusion which afterward became purulent.
3. Phthisis might be simulated.
4. It might resemble *pneumonia ambulans* in its going from lobule to lobule, or from one lung to the other.

However, there were two conditions which almost always presented in connection with the disease—a depreciation in the general health for months before the abscess formation, and general alcoholic poisoning. The liability was the same at all ages. The course of the disease could best be examined by reviewing the history of several typical cases.

1. A delicate boy, for two weeks previous to the development of the pulmonary abscess, suffered from headache, insomnia, fever, pain in the left side, and cough without expectoration. An area of dullness had been found below

the spine of the scapula, which also gave loss of vocal fremitus and respiratory murmur. Later on suppurative amygdalitis had been developed, and still later a large amount of fœtid pus had been coughed up, after which recovery had slowly taken place.

2. This case (taken from the *Lancet*) had resembled an attack of pleurisy with effusion, toward the close of which a bulging had appeared on the left side, the tonsil had become inflamed and had suppurated, and afterward the swelling in the side had burst and discharged a large quantity of pus; but, as the proper treatment had not even then been gone into, the patient had died of the abscess.

3. This case had begun with suppurative amygdalitis, which had gone on to recovery, but subsequently there had been a rigor, and signs of consolidation had developed, and still later a pint or more of pus and blood had been coughed up. Apparent recovery from this attack had been followed after a time by a second attack in which the same symptoms were repeated. The pus contained the pneumococcus of Friedländer.

4. This case had first presented palpitation resembling that resulting from a gastric disturbance, and the condition had been much improved by a better diet; but afterward cough, fever and emaciation had appeared, and an area of dullness had been found in the right subscapular region; still later pus and blood had been coughed up in amount. A cavity and profuse expectoration had persisted for some time, but gradually the cavity had closed, the night sweats had ceased, and the patient had regained his ordinary weight of two hundred pounds and robust health in every particular.

The rapid recovery of health that followed the evacuation of one of these

simple abscesses, as well as an examination of the pus under the microscope, would serve to distinguish them from tubercular abscesses. The larger abscesses of this variety should be freely incised and drained early in the course of the disease. Injections of antiseptic solutions were to be avoided. Much attention was to be given to food, air and surroundings. There was no doubt that many died of the disease in whom it was not recognized.—*Ibid.*

DISEASES OF THE URINARY ORGANS.

Juniper Berries as a Diuretic.

ACCORDING to the Paris correspondent of the *British Medical Journal*, Dr. GOLDSCHMID, of Fehrltorf, highly praises the inspissated recent juice of common juniper berries as the best diuretic in children. Attention was drawn to this remedy by Professor J. Vogel, of Dorpat, in his classical handbook on children's diseases. While being most effective, the remedy is exceedingly mild and altogether free from any unpleasant accessory effect. Two or three teaspoonfuls should be given daily, diluted with water and sweetened with sugar. The little patients take it very readily. The author describes a severe case of nephritic dropsy in a girl, aged 7, where the juice rapidly induced a profuse diuresis, and permanent recovery ensuing in a fortnight.—*Therapeutic Gazette.*

Ethereal Tincture of Perchloride of Iron in Chronic Nephritis.

IN the *Journal de Médecine*, Dr. WYSS, of Geneva, states that he has employed the ethereal tincture of the perchloride of iron for more than two years in numerous cases of chronic Bright's disease, and that in more than half of them he has been able to note the com-

plete disappearance of the albuminuria and other symptoms. He administers ordinarily 5 to 10 drops of the tincture in a glass of water three to six times daily.—*Coll. and Clin. Record.*

DISEASES OF CIRCULATORY ORGANS.

An Early Sign of Endocarditis.

EVERY one who has watched a case of acute articular rheumatism and has noted the appearance, during its course, of valvular lesions of the heart, must have wished for some means whereby the intercurrent of endocarditis might be detected at an early period. Usually the first sign of this complication is a murmur at one or other of the cardiac orifices, an indication that the valves are already involved in the inflammatory process.

Dr. DUCLOS, of Tours, writing in the *Revue Générale de Clinique et de Thérapeutique*, records a fact of his experience, in regard to commencing endocarditis, which may possibly be of value as an aid in the early recognition of this affection. While in charge of a military hospital he chanced to have a large number of young soldiers suffering from acute articular rheumatism under his care. One day, while listening to the heart sounds of one of these patients, his finger being at the same time on the radial pulse, he was struck with the want of synchronism between the ventricular contraction and the pulsation at the wrist, the latter being delayed about two-thirds of a second. The following day a systolic apex murmur was heard. Thinking that this retardation of the radial pulse might have some significance in connection with the subsequent development of endocarditis, he took pains to note its occurrence in other cases, and found that it was followed by a murmur at the end of from twenty-four to thirty-six

hours in every instance. These observations were extended over a period of several years, and were confirmed in a number of cases by Professors Parrot and Potain.

The author has no conclusive theory to offer in explanation of this phenomenon, but he thinks that it is probably due to a weakening of the muscular fibres subjacent to the endocardium. He compares it to the weakened respiratory murmur frequently observed at the beginning of a pleurisy a few hours before a friction sound is developed or effusion takes place. It would be interesting to learn whether this want of synchronism is present in the beginning of endocarditis arising in the course of other diseases, but the author has few observations bearing on this point to record. He has noted it, however, in two cases of typhoid fever and in three of erysipelas, in which endocarditis subsequently developed.

Dr. Duclos draws some practical conclusions, in regard to treatment, based upon the early recognition of the affection, and he believes that he has succeeded in arresting the disease, in certain cases, before irreparable injury has resulted. His plan is to apply immediately a large fly blister over the præcordial region, or, in default of this, a mustard plaster, dry cups, or leeches. He increases also the dose of the remedy that is being at the same time given for the rheumatism. Of course, a strict enforcement of recumbency is also indicated.

When we consider the importance of an early diagnosis of endocarditis, and the possibility of arresting the disease if detected in its incipency, this alleged premonitory symptom of the affection is worth testing in order to determine the amount of practical utility that it may possess.—*Medical Record.*

THE AMERICAN MEDICAL DIGEST.

PART II.

SURGERY.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

Wiring the Fragments in Simple Fractures of the Lower Extremities.

DR. CLAUDE A. DUNDORE (*Medical and Surgical Reporter*):

Every surgeon has seen cases of compound fractures of the leg, which were difficult of reduction and in which the fragments were very often displaced, and consequently had to be brought into apposition again just as often. Now this causes a high degree of inflammation, and a tendency to suppuration if the most thorough antiseptic treatment is not followed, and often even when all antiseptic precautions have been taken. The operation of wiring the fragments obviates these difficulties, and, if it is done carefully, the above mentioned unpleasant symptoms are almost certainly avoided. The inflammation generally abates very rapidly and there is little or no suppuration, if perfect antiseptic treatment is carried out.

But what I particularly desire to advance in this communication is the advisability of cutting down to the fragments in simple fractures of the leg and wiring them. Of course, in fractures in which there is little or no displacement, or when reduction is not difficult, this measure is uncalled for; but there are many cases in which reduction is difficult or impossible, and the number of crippled limbs is the best evidence of it. The fragments are often of such a shape that it is impossible to bring them into apposition or to be able to ascertain what causes the displacement, without laying the seat of fracture open to view. If we do bring the fragments into good apposition we are often at a loss to keep them so, for the ordinary treatment does not prevent displacement. By cutting down to the

seat of fracture we are enabled to see exactly what we are about, and after wiring the fragments there can be no displacement.

This method is the only one which gives us satisfactory results in fractures of the patella, for there are no other means by which we can get good apposition of the fragments and bony union. All other appliances give us evil results too often for us to adopt them. In cases of fracture of the patella, Dr. Biddle cuts down and wires the fragments, dresses the incision antiseptically, and places the limb on the ordinary straight splint with the heel elevated. By the time the first dressing is removed the incision has healed by first intention and we have a simple fracture for treatment, and good apposition.

Glass-Blower's Deformity of the Hands.

A. PONCET (*Annals of Surgery*) says:

There exists in glass-blowers a professional deformity of the hands, to which attention has not hitherto been called. It is characterized by a prominent flexion of the fingers upon the hand. The little and ring fingers are more flexed than the middle and index. The thumb is free. The flexion especially affects the second phalanx, which is inclined almost at a right angle to the first phalanx. It is not due to thickening of the skin or to fibrous bands, but to contracture of the flexor tendons and especially of the flexor sublimis. This can be made out by careful examination under chloroform.

The inter-phalangeal articulations are more or less deformed with a tendency to subluxation. The fingers are inclined towards the ulnar side.

The skin on the palmar aspects, though a little thickened and callous, is not more so than may be observed in work people of other professions.

The deformity is known among French glass-blowers as *main en crochet* and *main fermée*. According to the observations of one of Poncet's internes M. Etienne Rollet the greater number of glass-blowers present this lesion and the longer they have worked the more marked it is found to be.

The mechanism of its production is easily understood. Glass-blowers employ a tube, 20 centimetres long and weighing two kilogrammes, to which they give a rapid movement of rotation between their closed hands. They work from eight to ten hours a day, according to Poncet, holding the tube all the time. The complaint comes on gradually and progresses. When once formed it never retrogresses.

The glass-blower's profession is extremely laborious. It is followed by young men who give it up at about the age of thirty-five years. The "*main en crochet*" is found only in glass-blowers, and in no other workmen, alleges Poncet; but we cannot help thinking that many laborers accustomed to grasp the handles of implements such as pickaxes and wheelbarrows, show a tendency to the same deformity, if not marked examples of it. It is also contrary to all analogy, and scarcely credible that contracture of tendons can exist for a lifetime without nutritive shortening of ligaments and other neighboring structures supervening.

The deformity seriously compromises the usefulness of the hands. It has often been the cause of exemption from military service.

The Correction of Nasal Deformity by Means of Plastic Operation.

DR. OBLINSKI, of Krakau, in his paper refers more particularly to deformities resulting from loss of the cartilaginous framework of the nose.

Dieffenbach treats this class of patients superficially, recommending the division of the cicatrices, by means of a tenotome, and the filling of the nares with lint. This method gives only temporary relief.

In a girl æt. 16, Professor Oblinski found the following deformity: The tip of the nose, as a result of the destruction of the cartilaginous septum, was sunken in; on each ala nasi there was a deep longitudinal groove, formed by cicatricial tissue, dividing the lower half of the nose into three spheroidal growths, which eventually would completely obstruct the nares. At the upper end of the right sulcus there was seen an opening through which the air entered into the nostril. The author, after completely cutting out the right groove with its cicatricial tissue, and also incising the opening in its upper extremity, replaced the gap thus left by an oblong flap from the cheek, cut from the cheek, cut from the upper end of the right sulcus. The flap was 2 cm. long and 1 cm. broad and easily filled the gap. Primary union occurred. The left sulcus was also excised in the same manner, and replaced by the oblong cheek flap. The cosmetic result was satisfactory. The tip of the nose was well raised. The author recommends, however, a larger flap in the future, thus allowing for subsequent contraction.—*Deutch Zeitsch. f. Chir.—Annals Surg.*

Treatment of Penetrating Gun Shot Wounds of the Cranium.

DR. JOSEPH D. BRYANT, in a paper read before the Medical Society of the State of New York (*N. Y. Medical Journal*), concludes that:

1. A bullet should be removed from the brain as soon after its reception as its situation can be determined and the patient's condition will permit.

2. A bullet should be removed from the brain at a later period if symptoms supervene and it can be located.

3. A bullet that has been located in the brain and has not been removed, should be removed before the supervention of symptoms, when it assumes a migratory character.

4. No effort should be made to remove a ball from the brain if it cannot be located.

Burns.

THE following is a useful application to Burns (*Centralblatt für Therap.*) :
℞. Olei olivæ, p. vj; salol, p. j; aquæ calcis, p. vj. M.

Mosquito Bites.

A WRITER in a foreign journal suggests that for mosquito bites and the bites of other insects the affected part be painted with chloroform, which will at once relieve the pain and itching, and soon reduce the swelling.

Linen Thread for Sutures and Ligatures.

DR. WILLY MEYER reported having found a substitute for other kinds of ligatures and sutures in linen thread, such as was sold at the regular dry goods shops. His experience with its use was only a short one, but confirmed the results obtained with the same article by Trendelenburg. It was serviceable, safe, cheap, and easily prepared.

The only preparation necessary was to wind it on a glass rod and soak it for twelve hours in a solution of corrosive sublimate (one per cent.) and then preserve it, wound on a glass spool, in a one-to-one-thousand solution of the same. It was not necessary to boil it first in a five per cent. solution of carbolic acid and then preserve it in alcohol, as had once been done with silk. By soaking the thread in a ten per cent.

solution of iodoform in ether, shortly before using it, iodoform linen thread could easily be prepared.

The thread made by Marshall & Co. was sold in various sizes. No. 40 answered well for sutures and ordinary ligatures, and No. 25 for tying arteries of a larger calibre. A smaller size (about 50 or 60) should be used for plastic operations.

Linen healed well in the wound, but should be used only where primary union was to be expected. In comparison with catgut, its only disadvantage was that it was not so slippery and therefore had to be pulled more. When moist it was stronger than when dry. Of course, catgut was the ideal article for the purposes under discussion, but its aseptic condition, even after a thorough primary disinfection, was often untrustworthy, especially in the case of a thick thread which had been preserved for some time. Linen thread was especially adapted for use in large institutions and dispensaries on account of its easy preparation and its extremely low price.

Dr. Weir remarked that he had been using silk in all his operations of late, and had never got better results, except from the old style carbolic catgut, which was now called unscientific.

Practical Points in the Administration of Ether.

DR. GEORGE F. SHRADY, in *Medical Record*, concludes a valuable paper on this subject with the following useful suggestions :

1. In commencing the administration of ether the gradual method is to be preferred.

2. Its employment allows the lungs to empty themselves of residual air, prevents coughing and struggling, and places the organs in the best possible

condition to receive and rapidly utilize the ether vapor.

3. After the stage of primary anæsthesia is reached, the more pure ether vapor the patient breathes the better.

4. The shorter the time of anæsthesia, and the smaller the amount of ether used, the less likely are the unpleasant sequelæ to occur.

5. The more evenly it is administered the less shock to the patient.

6. Anæsthesia should be entrusted to experienced administrators only.

7. Many of the fashionable efforts to resuscitate patients are not only useless but harmful.

8. The minimum amount of force should be employed to restrain the muscular movements of the patient.

9. Mixed narcosis is often advisable for prolonged operations.

10. The utility of the galvanic battery, in threatened death is yet to be proven.

11. The most trustworthy means of resuscitating desperate cases are artificial respiration, hypodermic stimulation, inhalation of nitrite of amyl, and inversion of the body.

The Method of Conducting Post-mortem Examinations of Infants.

BEFORE beginning the post-mortem examination on the body of an infant that was three months old and was supposed to have died of congenital syphilis, Dr. HIRST remarked that the body should always be weighed first; he also said that the liver and spleen in congenital syphilis are not, as in health, one-thirtieth and one-three-hundredth respectively of the whole weight, but bear a much larger ratio, the former reaching sometimes so large a ratio as one-sixth of the whole body weight. There are certain anatomical peculiarities in an infant's body with which one should be acquainted. The bladder,

sigmoid flexure, and vermiform appendix are much larger proportionally in infants, while the position of the stomach is vertical, thus rendering vomiting so easy as to be mere regurgitation.

Upon external examination of the child nothing noteworthy was found. On opening the abdomen, the spleen was found to be of normal size, as was also the liver, so that there proved to be far less ground for suspicion of congenital syphilis than had been looked for. The kidneys were, as usual, lobulated. The respiratory organs were examined from the mouth down, in order to detect a foreign body, as a curd of milk, in the trachea, if the child had during life inspired some solid substance. The lungs were healthy, thus excluding pneumonia, which is a very frequent cause of death in infants. The thymus gland was normal. Dr. Grawitz has reported two cases in which this gland was so enlarged as to choke the infant. The heart was normal. The ductus arteriosus was closed. Dr. Hirst has seen it open in an infant four weeks old, and again at the third month. The foramen ovale, which remains patulous for a few days in all cases, was found reduced to an opening the size of a pin. It is not rare to find an opening the size of a pin-hole at the site of the foramen ovale as late as the twelfth month. The dura mater being, as usual, adherent to the sutures, the cranium was hard to remove. A knife was passed down the coronal and saggital sutures, and the frontal and parietal bones thus removed. The brain was slightly congested, but not to a degree sufficient to have caused any serious symptoms.

Dr. Hirst thought that the cause of death in this child, which had had diarrhea, was either an ulcerated condition of the mucous membrane of the large intestines or an inflammatory in-

filtration of their connective tissue, causing atrophy of the absorbent glands, which latter condition a microscopic examination would be necessary to show. He also referred to the common occurrence of post-mortem intussusception in young infants and remarked that the difference between ante and post-mortem intussusceptions is that the latter are without signs of inflammation or congestion.

He regards sterilized milk as the great remedy to prevent diarrhea in infants, and he has recently devised a cheap and efficient apparatus for its preparation.—*Med. and Surg. Reporter.*

Boric Acid and Oil of Cacia as Wound Dressings.

DR. PRINCE (*American Practitioner and News*):

The ideal of a surgical dressing implies:

1. An agent which is not irritating.
2. One which will absorb any fluids that may escape and form a compound with them capable of resisting the ferments of the air.
3. One which will allow no neutral under surface where putrefactive changes may creep along the skin under the dressing and carry infection from without to a wound not completely closed.

These points can be affirmed of no substance which becomes solid or is completely insoluble. They cannot be affirmed of any gauze, or absorbent cotton, or wool, for all of these are capable of forming compact layers next the skin, out of which any antiseptic with which they may have been infiltrated may have been lost or neutralized, permitting germ bearing air to insinuate itself under the dressing. A sparingly soluble powder, applied in such quantity as to be more than

enough to absorb the exudates which escape from wounds, meets the desideratum. Many agents have been on trial, and, so far, that which has given the greatest satisfaction is powdered boric acid. The under crust, combined with blood or pus, is antiseptic and only sparingly soluble. These conditions prevent in greatest degree the exudates from decomposition.

The smarting effect of boric acid, when applied to a clean granulating surface, disappears after its combination with the exudates from the parts. If, however, the surface is free from sinuses or hiding places, there is no advantage in washing off the covering of the granulations, and the only excuse for redressing is the curiosity to inspect the wound.

Narrow strips of aseptic gauze or lint, spread with any aseptic oleaginous covering, may protect these delicate surfaces. These applications having openings there is ready absorption of exudates which appear in much quantity. The oil of cacia supplies to the antiseptic element of the dressing the quality of diffusibility.

Dr. G. V. Black has worked out the antiseptic qualities of oil of cacia, and has found that cinnamon water arrests putrefaction in a culture medium when added to it, as one to four. The diffusibility by which it readily combines with all parts of the culture liquid, gives it a great practical advantage over many other antiseptics of greater power, when thoroughly combined. The advantage of this quality for a wound dressing will be readily appreciated.

The oil of cacia has also another quality, that of preserving solids, acting like creosote in preserving meat against putrefactive invasions. When septic changes are already present in deep wounds, like the sinuses about large

joints, boric acid is not the most efficient agent for destroying infection. Sublimate solution $\frac{1}{1000}$ to $\frac{1}{10000}$, cinnamon water, and peroxide of hydrogen hold the first rank in such conditions. They make the best means for destroying putrefaction in its hiding places. While sublimate may be the most active antiseptic as to immediate action, its ready decomposition and its want of diffusibility impair its reliability.

The Use of the Bidet in Surgery.

I DESIRE to call the attention of the profession to a method of treatment which, although not altogether new, is yet not appreciated. I refer to a moderately forcible stream of water of varying temperature in the treatment of a number of affections of the rectum, anus and genito-urinary apparatus. The atonic and astringent effect of such a stream of water upon any living tissue is, of course, a well understood fact, and has been employed in the arrest of hemorrhage, in the treatment of inflammation, and in various other conditions. But it has only been in exceptional cases, and usually by the aid of more or less troublesome apparatus that it has been used in the class of cases to which I now refer.

The bidet, as I have now for a few years prescribed it, should be of the variety which can be attached to the water closet seat habitually used by the patient. It should have a nozzle capable of throwing a stream of about the calibre of an ordinary lead pencil or a little less. The head of water should be sufficient to make it impinge upon the parts exposed to it with enough force to excite there a little sensation of smarting and tingling. That degree of force will, for example, be sufficient for a patient to take an enema, or, if a female, to take a vaginal injection. The

bidet pipe should be movable by means of a handle, so that the stream can be directed against any portion of the external genitals, the perineum, the anus, or the surrounding parts. It should also have connection with the hot and cold water supply of the house, so that the water may be used of any temperature which the physician may prescribe, or which the sensations of the patient may make desirable. Stop-cocks should regulate the force and size of the stream, and should be so placed as to be easily reached by the hand of the individual sitting upon the water closet seat. Such an apparatus can be put in place by an experienced plumber, in an ordinary water closet, at an expense of from fifteen to twenty dollars; and, in this city at least, the usual head of water obtainable even in third story rooms is sufficient for all therapeutic purposes.

The cases in which it may be desirable to use this method of treatment may be divided into two classes: first, those affecting the lower end of the bowel and its outlet; second, those involving the genito-urinary system. Among the first the most important are hemorrhoids, internal and external, prolapsus ani, and slight cases of prolapsus recti; pruritus ani and eczema of the margin of the anus should also be included in this group of cases, in which it has now for some time been my habit to prescribe the systematic employment, twice daily, of the bidet, once immediately after the daily stool, and for the second time, by preference, just before going to bed. As a rule, in all but the mid-winter months, the ordinary temperature of Schuylkill water is that to be preferred, although I am largely governed by the feelings of the patient in this respect. An enema should be taken at each of these times, the lower portion of the rectum being thus thor-

oroughly washed out at least twice daily, after which the stream of water is allowed to play upon the affected region for a period of from five to fifteen minutes. The ordinary and useful effect of cool sponging or washing immediately after stool in cases of hemorrhoids, is by this means enormously increased; internal hemorrhoids will, under this treatment, in many cases almost entirely disappear, unless they are exceedingly large and have been frequently inflamed or strangulated and badly neglected; external hemorrhoids, even when fleshy, shrivel and become scarcely noticeable.

I could detail a number of cases of this character taken from my practice of the last two years. In some instances in which I had been habitually called in, at intervals of a few months, in the cases of old people, the result has been practically their disappearance from my list of patients; and they speak in the warmest manner of the great comfort which they have derived from this method of treatment.—*Medical Age*.

An Interesting Case of Cerebral Surgery.

THAT the opening of a cerebral abscess, when its location can be pretty definitely determined is justifiable, has been for some time admitted; that an "exploratory incision" is as warrantable in diseases of the cranium as in those of the abdominal cavity, seems about to be accepted as equally justifiable. A case shown to the Berlin Medical Society on December 5, by Professor von Bergmann, will go far toward settling the question of "exploratory puncture" in suspected cerebral abscess.

The patient, a workman, twenty-nine years of age, had suffered from otorrhœa for eleven years. For six years he had been ailing, and, after admission, it was found that there was some fever,

with evening exacerbations and shivering. Evidence of the intracranial mischief was afforded by the onset of headache and by a remarkable slowing of the pulse to 53 per minute. Finally, right facial paresis, with left hemianæsthesia and hemiparesis ensued, symptoms which confirmed the probability of a lesion of the left hemisphere affecting the sensory centres. The diagnosis of abscess of the temporo-sphenoidal lobe was made. The skull was freely opened, the dura mater incised, and the pulsating brain exposed. Having in two previous cases missed an abscess with the trocar, Professor von Bergmann now prefers to incise the brain. In the present case pus, which was extremely green and foul, was reached only on the third incision; the finger could be introduced into a smooth walled cavity. A drainage tube was introduced, and the wound dressed with iodotorm gauze. The subsequent progress of the case was very satisfactory; the drainage tube was gradually shortened, and in three weeks the abscess cavity was entirely closed. The patient was shown to the society six weeks after the operation; he was then free from fever, and the facial paresis and other nervous symptoms had disappeared; a considerable portion of the bone removed at the operation had been reproduced, but the otorrhœa persisted, though in diminished quantity, in spite of local treatment by scraping away the granulations with the sharp spoon. Professor von Bergmann commented on the danger attending the indiscriminate use of injections and irrigations.

Here was a case where the old methods—those of so-called "conservative surgery"—would have led to inevitable death, and the result shows the wisdom of the "rashness" in modern surgical

procedures. The two incisions which failed to reach the pus evidently did no harm, and even more might have been made with safety, if necessary, provided no locality have been invaded which may be regarded as specially dangerous to life. Of course, in order to operate, one must have a thorough knowledge of cerebral localization, and must limit himself to grounds which are pretty well known. There are certain points well demonstrated, however, which, if understood, will render it unnecessary for the operator to wade "through the great marshes of cerebral technology." As an outline, the following should be remembered :

1. Paralysis of the lower extremity points to a lesion of the summit of the ascending parietal convolution on both sides of the upper end of the fissure of Rolando.

2. Paralysis of the upper extremity indicates lesion situated in the middle third of the anterior and posterior convolutions.

3. Paralysis of the muscles of the face and tongue presumes a lesion of the lower third of the anterior central convolution.

4. Motor or ataxic aphasia is usually associated with lesions in the lower part of the third frontal convolution (on the left side in right-handed persons and on the right in left-handed).

5. Disturbance of vision may ordinarily be regarded as evidence of lesion in the three occipital convolutions and the cuneus. (This is typically shown in hemianopsia.)

6. Disturbances of hearing indicate lesions in the first and second temporal convolutions.

7. Disturbances of smell are frequently due to lesions involving the frontal lobes upon the base.

8. In cases presenting general symp-

toms of cerebral disease, and where no evidences of other local trouble can be discovered, it may be taken for granted that the lesion is in the frontal lobes—the seat of the highest qualities of the mind: reason, intellect, judgment and will-power; hence, a change in disposition and character, as a general rule, infers a lesion in that region.

In making a diagnosis it is ever necessary to bear in mind that lesions of the various white tracts within the substance of the brain may give rise to the same symptoms as those affecting the cortex—a distinction must be made between direct and indirect local symptoms. Another important point is that lesions irritating the motor regions give rise to spasms or convulsions, while those which destroy the cortex produce paralysis; and if the irritating lesion becomes a destroying lesion, the monoplasm is succeeded by a monoplegia. Starr calls attention to still another item of moment: Lesions in the motor area anterior to the fissure of Rolando usually produce paralysis without anæsthesia; lesions in the parietal lobules may produce anæsthesia, but do not cause paralysis.—*Brooklyn Medical Journal*.

Conservatism in Minor Surgery with Special Reference to Injuries of the Fingers.

DR. FULLERTON (*Medical Record*):

For lack of a similar and more perfect splint in the market, I have been using for some time, in this particular class of injuries, a splint and dressing which may be prepared as follows. Securing an assortment of sizes of the common paper shotgun shells, ranging from numbers eight to twelve, inclusive:

First, remove the capped end of the shell.

Second, remove about one-third of the surface of the shell by cutting from

end to end in parallel lines, leaving the remainder of the shell, about two-thirds of which is in the form of a trough with rounded bottom and corners. We shall then have formed a slotted flexible tube. (I also believe that a similar splint, manufactured of wood or straw pulp, saturated with an antiseptic solution—the splint being of sufficient strength and size to fit any member of the body—would commend itself to the favor of the surgeon.) Always select a size that will nicely fit the finger.

Third, take a piece of surgeon's medicated lint, of sufficient size to encompass about two-thirds of the injured finger, saturate it with iodoform and glycerine, one part of the former to twenty of the latter, and place the prepared lint in the slotted tube.

Fourth, after a thorough antiseptic cleaning of the wound, if any, reducing any fractures or dislocations, and removing all hopeless fragments or spiculæ of bone, and, while extension is made by an assistant, place the finger in the slotted tube, securing it by adhesive strips passed entirely around the finger and tube, near each extremity. Dress antiseptically, and place in a sling.

Claims for this dressing.—First, it is neat, light, cheap and simple. Second, it is flexible, and therefore allows for extension from swelling, by simply cutting adhesive strips. Third, by cutting a fenestra opposite the wound it may be inspected and dressed daily without removing the splint, at the same time affording the proper drainage. Fourth, the splint being in the shape of a slotted tube, and when applied giving both anterior and posterior, as well as lateral support to the injured member, thereby securely retaining the fragment in perfect apposition. Fifth, the material of which this splint is constructed being such that the surgeon can, with a knife,

in a moment adjust or perfectly fit it to the injured member.—*Medical Record.*

VENEREAL DISEASES.

Acute Gonorrhea Treated by a New Method with Success.

DR. McCaw (*Dublin Journal Medical Sciences*):

* H. J. had impure connection four days before he applied to me for relief. His symptoms were those of acute gonorrhea, the disease having been considerably aggravated in consequence of his having been drinking heavily both before and since he contracted it. The yellowish green discharge from the urethra was abundant; he suffered severely during micturition, and there was great tenderness along the whole course of the penile urethra. The night before he came to me he was obliged to rise five times to pass water. He had the disease seven years ago, and was then under treatment for about two months with a medical gentleman in this town, who gave him copaiba.

The line of treatment adopted in this case was by the introduction into the urethra of medicated bougies, and the medicament consisted of sulphate of thallin of five per cent. strength.

Before introducing the bougie I made the patient micturate, in order to clear the urethra of discharge, and I then passed the bougie up to the ring, and directed him to hold the meatus quite close, so that none of the application could flow out as it melted. I kept him lying on his back for twenty minutes, at the end of which time I withdrew the spring and closed the meatus with cotton wool. During the time the bougie was in the urethra he complained of smarting pain, but after I withdrew the spring he said the pain ceased entirely, and he expressed him-

self as feeling comfortable. He introduced one every evening after this, following carefully the directions I gave him; and on the third day after he had been with me he called to say he was quite cured, having no discharge of any kind, and no pain on passing water. The day following happened to be his busiest day in the week, as he had to work to 12 o'clock at night, and be on his feet the greater part of that time. In consequence of this he could not use his bougie that day at all, and on the next morning there was a slight return of the former symptoms; but he began anew his treatment, and after using two more bougies, was again perfectly cured. He has remained so since, although he has undergone the heavy day of the week which caused him to relapse before, and this time with impunity. No bad after effects of any sort resulted from the treatment.

Nature and Prevention of Urethral Fever.

DR. JAMES BELL, Surgeon to the Montreal General Hospital, in a paper read before the Medico-Chirurgical Society of Montreal, says that all surgeons, and in fact most general practitioners, are familiar with certain forms of constitutional disturbance which follow instrumental or operative interference within the urethra. In a certain number of such cases pre-existing disease of the kidneys, ureters or bladder, or of all these organs combined, or the setting up of a true sepsis (pyæmia or septicæmia), or the production of the disease known as surgical kidney, may explain these symptoms. But there still remains a large class of cases occurring in male patients of all ages, and often where no lesion of any organ can be discovered, even by post-mortem examination, in which instrumental or operative interference within the urethra is followed

by the train of symptoms to which has been given the names urethral fever, urine fever, catheter fever, etc. These symptoms, he says, occur in one of four different forms:

1. Shock, collapse and death within a few hours after operation (9 to 24), with or without chill or fever, and with partial or complete suppression of urine.

2. A severe chill with high fever occurring a few hours after operation, and usually following the first act of micturition. Profuse sweating and prostration follow, but the whole disturbance lasts only from a few hours to two or three days.

3. Recurrent chills and high fever coming on at irregular intervals and lasting, perhaps, for weeks or months.

4. A moderate fever with slight chills or chilly feelings, accompanied with great depression, low muttering delirium or semi-coma, dry, cracked tongue and anorexia, and usually ending fatally. Such cases occur only in old men with enlarged prostates, and in whom, as a general rule, attempts at catheterization with solid instruments have resulted in the formation of false passages just in front of the prostate and on the floor of the urethra. This form differs materially from the preceding ones, but clinical experience points strongly to its being identical in its origin.

Patients belonging to the second and third classes, he says, generally recover completely and satisfactorily. He then refers to three distinct theories which have been advanced as to its origin: 1. That it is a septic process. 2. That it is due in some obscure way to reflex nervous phenomena. 3. That it is due to uræmia.

After declaring these theories inadequate to explain the affection, he states that the discovery of the animal alkaloids known as ptomaines and leuco-

maines, and the experiments of Dr. Bouchard of Paris, from 1882 to 1886, upon the toxicity of the alkaloidal substances found in normal urine, seem to have given the key to a rational explanation of the origin of urine fever. From the amount of evidence which we now possess Dr. Bell thinks there can hardly be any doubt that this disease is due to the absorption of the products of decomposed or decomposing urine from cut, lacerated or abraded portions of the urethra. It is not a septic process, but a form of poisoning closely allied to uræmia and due to the absorption of a toxic alkaloid produced by or during the decomposition of the urine. The clinical facts pointing to this conclusion, he says, amount almost to a demonstration. They are as follows:

1. Urine fever is unknown after perineal lithotomy, external urethrotomy and internal urethrotomy in the pendulous urethra, and is far less frequent when the urethra is wounded on its roof than when it is wounded on the floor.

2. When, after internal urethrotomy, the urethra and bladder have been carefully washed out with an antiseptic solution, urine fever does not occur until some time after urine has been passed over the wounded urethral surface, and is then of a mild type and generally free from danger.

3. Operations upon the female genitals which wound or injure the urethra are not followed by any similar condition.

4. Mr. Harrison, of Liverpool, has shown by a number of operations that when the bladder is drained by a perineal wound after internal urethrotomy that urine fever never occurs, and he attributes its origin to the absorption of the products of decomposing urine from wounds of the mucous membrane.

Dr. Bell then attributes his experience in support of this important observation and adds his testimony in favor of the combined operation. He has records of five cases in which he has performed, within the past twelve months, the combined operation, and also of six cases of simple internal urethrotomy for stricture of the deep urethra performed within the same period of time. The five cases in which he drained the bladder by a perineal cystotomy were selected for this operation because of specially bad features in each case. The six cases in which he did a simple internal urethrotomy were, with one exception, not drained, because they were more favorable cases for operation. In the first series, in which he drained through the perineum, there was not in any case a subsequent rigor or rise of temperature, while in the six cases of the second series urine fever in a mild form followed in four cases, but only after micturition. Only two cases escaped, and in these he believes the result was due in great part to greater intelligence on the part of the patient.

After giving brief account of each of the cases referred to, he submits the following conclusions:

1. That urine fever is a consequence of the lodgment and decomposition of urine in contact with wounded urethral surfaces, the inference being that the absorption of the product of decomposition which takes place from the wounded surfaces, and which could not occur through the normal urethral mucous membrane, is the direct cause of this condition. Mr. Harrison has also shown that patients whose urine contains a diminished quantity of urea are less liable to urine fever after operations upon the urethra.

2. Urine fever is absolutely preventable, either by preventing the decomposi-

tion of the urine in contact with urethral wounds, or by providing a dependent drain so that it cannot lie in contact with wounded urethral surfaces long enough to decompose.

3. That a perineal cystotomy is a simple and easily performed operation, which does not materially add to the risks attending urethrotomy, and is not followed by unpleasant results if the drainage tube or catheter be not too long retained in the perineal wound.

4. That decomposition of urine can be delayed for a considerable time by thorough cleansing of the urethra and bladder by injection of a weak antiseptic solution (salicylic acid or sublimate) after operation. This, with the precaution on the part of the patient of abstaining from passing urine for as long a time as possible, will greatly lessen the frequency of occurrence of urethral fever and diminish its risks. Repeated washings of the urethra in this way after each act of micturition for a few days would probably prevent the attack of fever altogether.

5. Quinine, aconite and other drugs may be of use when urine fever has occurred, but they are powerless in most cases to avert it.

6. Patients with enlarged prostate whose deep urethras have been lacerated by the passage of solid instruments should be treated by perineal cystotomy at once in order to arrest urine fever (or sepsis), either of which is likely to occur as soon as the patient is able to evacuate a part of his urine without the catheter.—*Montreal Medical Journal*.

DISEASES OF THE SKIN.

Chronic Erythema Nodosum.

M. E. BESNIER recently presented to the weekly clinical reunion at l'Hôpital St. Louis, a young woman whose legs

were the seat of erythema nodosum. The lesions, of a livid color, were localized in these portions of the body and were also peculiar in that they developed over the whole surface of the leg, lasted for so long a time, and had such an indolent course. Iodide of potassium had no effect. They disappeared under the combined influence of rest and systematic compression. The nodes in this case resembled very much those of syphilitic or scrofulotuberculous origin.—*St. Louis Med. and Surg. Journal*.

Vidal's Red Plaster.

THIS plaster, which has rendered excellent service in the treatment of impetigo, ecthyma, superficial dermic ulcerations, folliculitis, etc., is composed as follows, according to Dr. L. BROCCQ (*Journal of Cutaneous and Genito-Urinary Diseases*): R. Minium 25, cinnabar 15, emplastr diachyli, 260. M.

This is to be spread upon fine linen so as to make a sort of adhesive plaster, which may be cut into pieces the size of the lesions to be covered. It is to be changed every twelve to twenty-four hours, according to the abundance of supuration.—*Ibid*.

Acne.

THE following treatment of acne is recommended in the *Med. Press and Circular*: R. Resorcin, zinci oxidi, amyli, āā 3j; vaselin, 3iij. M. Pass over the face each night for two weeks and wash off in an hour with hot water.

Peppermint Water in Pruritus Pudendi.

IN an article published in the *British Medical Journal*, and quoted in a recent number of the *Medical Chronicle*, Dr. AMAND ROUTH advocates the employment of peppermint water as a lotion in pruritus pudendi. He sug-

gests that for the sake of convenience the aqua menthæ piperitæ of the British Pharmacopœia, which is somewhat bulky, be concentrated, an object best attained by borax, in itself soothing and antiseptic. Patients can make their own lotion by putting a teaspoonful of borax into a pint bottle of hot water, adding five drops of oil of peppermint, and shaking well. The parts affected are to be bathed with a soft sponge. If the skin is unbroken, this lotion will remove the itching; otherwise, a preparation made of olive oil and five grains of iodoform to the ounce should be used in its place. Peppermint water gives the most permanent relief in the neurosal form, especially in the reflex pruritus of pregnancy. It is also efficacious in the pruritus which occurs at the climacteric, or in elderly women, in whom it may be only a part of a general pruritus, besides those cases of women of all ages when the urine becomes of a very low specific gravity, without any evidence of their having a gouty or granular kidney, as a remote cause. Peppermint excels all other drugs, cocaine not excepted, in cases due to pediculi, ascarides, an irritable urethral caruncle, an intracervical polypus, cancer of the cervix, distension of Bartholin's ducts or glands; the leucorrhœa of elytritis, endotrachelitis, and metritis, the irritating discharges of advanced carcinoma uteri, or a gouty or diabetic diathesis.

Sycosis.—A Clinical Study.

DR. G. T. JACKSON (*Journal of Cutaneous and Genito-Urinary Diseases*) concludes a study thus:

1. *As to Ætiology.*—Nationality is unimportant. The fact that the greatest number of cases occurred in those of American birth is of no significance, as it is due purely to the accident of the

place in which the cases occurred. Occupation seems more promising as an ætiological factor. All but four of the patients were engaged in occupations that compelled them to live in close rooms filled with dust. It has always seemed to me that the disease takes special hold on tailors. Their mode of life is about as unphysiological as possible.

A poor general condition of health is a prominent ætiological factor. In about one-third of the cases digestive disturbances (dyspepsia and constipation) were noted. Doubtless, if the notes were fuller, more cases of like kind would have been found.

Nasal catarrh is noted in four cases in which the upper lip was affected.

The disease may appear at any age after the beard has begun to grow, but is most frequent between the ages of twenty and forty, nineteen out of the twenty-two cases occurring between those ages.

2. *The Course of the Disease.*—It is exceedingly chronic and shows little tendency to get well of itself. It may last for fifteen years or more.

3. *Location.*—The upper lip alone or in combination with other regions, is most often the seat of the disease—fourteen out of twenty-two cases. The whole beard is quite frequently involved—five times in twenty-two. The chin alone is rarely affected—only twice in twenty-two cases. The scalp may be invaded.

4. *Treatment.*—While I have marked only one case as cured, nearly every case shows marked improvement under treatment, and without doubt some of them were cured, but failed to report themselves so as to have the final result entered on the notes. If a study of these cases teaches any thing, it is that one must be prepared to tack about

from one method of treatment to another in conducting a case to a happy ending. The best results were attained by means of antiparasitics, which would support the theory of the coccogenous origin of sycosis.

The first thing to be done is to open up the pustules and get rid of their contents. Epilation, soap frictions, and the use of the dermal curette all do this, and all prove beneficial—twelve cases out of fourteen.

After epilation or curetting the chosen application should be made, whether as an ointment or oil.

Salicylic acid with Lassar's paste proved beneficial in four cases; as an oil, with castor oil, it did well in one case and seemed to aggravate in another.

Tar did well in two cases.

Mercury was most valuable in the form of Bronson's ointment (hydrarg. ammon., $\mathfrak{D}\mathfrak{j}$; hydrarg. chlor. mitis., $\mathfrak{D}\mathfrak{i}\mathfrak{j}$; vaseline, $\mathfrak{z}\mathfrak{j}$. M.), and I would say that ever since I learned its virtues, while I had the honor of assisting Dr. Bronson for a number of years at the New York Polyclinic, I have greatly esteemed it, and do regard it as the most elegant form of mild mercurial ointment. The solution of corrosive sublimate was also useful.

Sulphur in ointment form did well in three cases, but was of no benefit in another case.

Boric acid proved very beneficial in three cases, but did no good in another case. Where it benefited it showed its good effect promptly.

Diachylon ointment was beneficial in two cases, and of no benefit in three cases. It is rather remarkable that the only case marked as cured got well while using this ointment.

Ichthyol proved harmful in the only case in which I used it. It should have

been given a longer trial, perhaps, but at the time I had used it in a number of cases of other diseases without benefit, so I did not feel encouraged to further experiment.

Resorcin in three per cent. strength was used in two cases without benefit.

The exhibition of sulphide of calcium by the mouth was of marked benefit in four cases in which there was a good deal of pustulation. The calcium was continued until either the disease was greatly aggravated as shown by the outbreak of many new pustules, or benefited as shown by a marked decrease of the pustulation.

From a study of these cases I would formulate the treatment of sycosis as follows:

In acute cases where there is much pustulation, epilate or curette and apply boric acid ointment, or Lassar's paste with salicylic acid. Give one tenth of a grain of calcium sulphide in fresh tablet triturates every one or two hours. If an acute outbreak of pustules occurs under it, stop it until a subsidence of the eruption takes place, and then begin again.

In subacute cases where there is not so much pustulation, but more redness and the disease is more patchy, epilate or curette and use Bronson's ointment, or one of sulphur or tar, or other mild stimulant. Or use soap frictions, followed by protective ointments.

In chronic cases epilate or curette, or apply a solution of caustic potash carefully to diseased parts. Locally employ strong ointments or solution of tar, provided caustic potash has not been used. If caustic potash has been used, then apply a simple soothing dressing. The use of tar in alcohol, as proposed by Pick, of Prague, has of late given brilliant results in my hands in some cases

of chronic eczema, and in the last few days has greatly benefited one of the cases here reported, one which had shown itself to be very obstinate. Soap frictions are also valuable at this time. As chronic and subacute cases may take on acute forms under stimulating treatment, we must be prepared at any time to apply more soothing methods of cure according to indication.

For the best effect from our local treatment we must insist upon our remedies being kept constantly applied during day and night. To the same end, the patient is to be advised to shave himself about twice a week. This is not absolutely necessary, but facilitates the action of our applications upon the diseased skin. If a rhinitis be present, appropriate remedies must be used for that.

While treating the skin affection we must not forget the man whom the skin clothes. We must address ourselves to the task of regulating the diet and general hygiene of the patient, and give medicine, if needs must, upon the same principles as we would if the patient came to us not for his sycosis, but on account of his poor general condition.

5. The prognosis is always doubtful as to rapid cure. The disease is prone to relapse when apparently well. A cure can be effected only by persistent effort both by the physician and patient.

DISEASES OF THE EYE AND EAR.

In Otorrhœa Which Acts Best, Boracic Acid in Powder or Solution?

NEARLY all writers prefer to use boracic acid in powder rather than in solution, but Dr. THEOBALD, of Baltimore, greatly prefers the solution and has given his reasons at length in the Transactions of the American Otological

Society. The matter is of so much interest that I epitomize his reasons for so doing.

1. He thinks the solution better promotes the healing of the perforation in the drum.

2. The solution, as he thinks, is safer when used in cases of acute inflammation of the drum. In this connection he compares the action of powdered boric acid to powdered alum, having seen the latter, when insufflated in one case of acute inflammation of the drum, give rise to very serious brain symptoms. This comparison and inference are very unjust to the powdered boric acid, as there is absolutely no similarity of action between the two powders, except so far as their physical appearance is concerned.

3. The solution can be more successfully used by the patient than the powder. He makes a saturated solution and has the patient syringe the ear with it, for the purpose of cleansing it. Of course the solution must always be warmed. Although Dr. Theobald is good authority, his ideas on this subject certainly will not hold good. In the discussion that followed the reading of his paper, it seems that he is alone in preferring the solution over the powdered boric acid. He strongly recommends the solution in the treatment of fresh abscesses of the drum. All the others advise against the use of the powder in such cases till the acute inflammation has subsided, as shown by the cessation of severe pain. This advice corresponds to my custom. I never use boric acid in the very early stage of drum abscess, but prefer to let the suppuration go on long enough—a day or two—for the swelling and severe pain to subside, but at the same time keeping the ear as clean as possible. This, I think, is all the good the syring-

ing of the solution can do in this stage. I have had very fine effects from injecting a saturated solution of boric acid through the catheter into the drums where there were no perforations. The solution dissolved the tough mucopurulent secretions, which filled up the drums, so that subsequent inflation removed them.

I have never seen any of the bad effects from the use of boric acid in the ear mentioned by others, and firmly believe that they are due solely to the impacting of the powder. This latter should always be allowed to lie upon the drum loosely and the meatus should never be filled full. Boracic acid should never be packed into the ear.—*St. Louis Med. and Surg. Journal.*

Bacteriology and Antisepsis of the Conjunctival Sac.

IN the St. Petersburg weekly *Vratch*, Dr. JOSEPH S. FELSER, of Kazan, describes his instructive bacterioscopical researches, undertaken for the purpose of studying mycotic life within the human conjunctival sac, as well as with the view to discover the best method of aseptic and antiseptic management of the conjunctiva in cases of ophthalmic disease and operations. The main outcome may be condensed thus:

1. The conjunctival sac in man, both in health and disease, always contains large numbers of microbes of different species.

2. This mycotic "store" is incessantly kept supplemented and refreshed by a free supply from enormous masses of microorganisms invariably present in the surrounding air.

3. The numerical strength of the conjunctival microbes is directly proportionate to that of the air bacteria.

4. Of pathogenic microbes, the predominating species are the staphy-

lococcus albus, citreus, aureus, and diplococcus, the first two forms prevailing also under absolutely healthy conditions.

5. In conjunctival catarrh, the staphylococcus pyogenes aureus occurs most constantly and in greatest numbers.

6. In inflammation of the lachrymal sac the diplococcus is invariably present, and that usually in a "pure culture."

7. Panophthalmitis developing after extractions of cataract is caused by the staphylococcus pyogenes aureus present in the conjunctival sac.

8. Of antiseptic ophthalmic means in vogue, corrosive sublimate (in the form of irrigations with a solution of 1 to 6,000) is exceedingly weak and untrustworthy in its action, while boracic acid (in the form of irrigations with a three per cent. solution) and iodoform (in powder) are ineffective altogether—they are powerless to destroy the vitality of the microbes or even to arrest their proliferation.

9. The best aseptic and antiseptic means yet known for use in eye practice, is, undoubtedly, trichloride of iodine (ICl_3) recently introduced into surgical practice by Drs. O. Riedel and C. Langenbuch.

10. While being wholly innocuous and void of any irritant properties, the trichloride is most effective in the destruction of microorganisms of any species.

11. In suppurative affections of the conjunctiva, the irrigation with a weak solution (1 to 6,000), repeated three, four, or five times a day, never fails to bring about rapid and striking amelioration. Even after the first three or four sittings, the purulent discharge becomes trifling or often ceases altogether, congestion lessens, and all unpleasant subjective sensations disappear, leaving no trace.—*Coll. and Clin. Record.*

THE AMERICAN MEDICAL DIGEST.

PART III.

Diseases of Women and Children.
and Obstetrics.

DISEASES OF WOMEN.

Pyosalpinx.

PROFESSOR POLK operated for pyosalpinx in a patient 35 years old, whose chief symptom was persistent pain. Disease was of several years standing.

On opening the abdomen the uterus, tubes and ovaries were found matted firmly together in a circumscribed mass. The left tube and ovary were adherent to the pelvic floor, and also to the rectum. The left ovary was enlarged and contained pus; and the tube was also distended with pus. On the right side, the ovary was very tightly attached to the rectum; the tube was twisted on itself, enlarged with pus, and adherent to the ovary.

By slow dissection with the fingers (the assistant pressing up the uterus with fingers in the vagina), familiarizing the touch as well as possible with the different tissues, Professor Polk isolated the left ovary and tube and removed them. The right ovary was so firmly adherent to the bowel that its removal meant almost certain laceration of that viscus; it was, moreover, hard and evidently contained no pus; it was therefore allowed to remain. The corresponding tube which was distended with pus, was separated with considerable difficulty from its plastic relations.

The seat of the operation was flushed with carbolyzed water; the peritoneum sewed with continuous catgut sutures; a glass drainage tube inserted in the inferior angle of the wound (to be removed in 24-48 hours, if possible); the fascia, together with the abdominal wall, sewed with interrupted silk sutures; iodoformed lint and gauze laid on, in layers; and a wad of antiseptic cotton applied under a binder.

Professor Polk remarked that these were the sort of cases he would formerly

have refused to operate upon. But of late his views have changed in this regard. And, although the operation had lasted nearly two hours, he believed the patient's chances of recovery about as good as after an ordinary oöphorectomy. He said it would surprise him very much if the patient were to die.

The operation could have been much more quickly performed had the old method of procedure been followed; namely, a longer incision, and the removal of the intestines from the pelvis and placing them upon the abdomen (there covered with hot wet towels), to permit of inspection as an aid in separating the adhesions. But the result would be, almost certainly, a fatal termination to the case. It makes a vast difference whether adhesions are of years' or of months' standing. Old adhesions, such as were present in this case, bind the viscera so closely together that it is almost impossible to distinguish one tissue from another. And it is only by the slowest and most careful procedure that separation may be safely accomplished. Had the right ovary been found to contain pus, he would, nevertheless, not have attempted its removal, but would have laid it open, washed it out, and inserted a drainage tube into it.—*Med. and Surg. Record.*

The Treatment of Suppurative Disease of the Uterine Appendages.

DR. H. J. BOLDT read a paper thus entitled, in which he endeavored to show that operative interference was positively indicated in certain cases of pyosalpinx, about which there was apt to be too much difference of professional opinion as to the treatment called for. He remarked that, while many women had been deprived of their tubes and ovaries without the least benefit, and had reason to regret having consented

to being operated on, there was also a tendency to go to an extreme in the other direction. Cases were not selected with proper care which deserved general instead of operative treatment.

Diseases of the uterine annexa might be roughly divided into three groups: 1. Those in which an operation was altogether unjustifiable. 2. Those where the effect of general treatment was to be watched for a time before an operation was considered. 3. Those where delay was not only inadvisable but dangerous. He wished to present several cases that had occurred in his own practice which had undoubtedly belonged to the third group.

1. A long standing case of metritis and local peritonitis following confinement, with radiating pains, headache, cardiac palpitation and dyspnœa; also, within five years previous, syphilitic infection had been superadded. Micturition had been frequent, menstruation very profuse, pains very severe before the flow began, and some leucorrhœa after it had stopped. Examination had shown an indurated cervix tender to the touch, the uterus somewhat enlarged and sensitive, both tubes and ovaries much enlarged and prolapsed, and the surrounding structures very sensitive. A diagnosis of double salpingo-oophoritis syphilitica with endometritis had been made and an operation advised, unless treatment was soon followed by improvement. A little later a physical exertion had been followed after a few hours by violent pain in the epigastrium, accompanied by a fresh attack of pelvic peritonitis. Five days later general peritonitis had developed, the tubes had lost their full contour, and, instead, a fullness with excessive painfulness had been found on either side of the uterus. Although rupture of the tubes had evidently occurred, he

had, unfortunately, not made up his mind to operate till the evening of the next day. The patient had survived the laparotomy only sixty hours; it had been deferred too long.

2. A case of catarrhal salpingitis of long standing in a woman of twenty-nine years, a sequel to scarlet fever at the thirteenth year. Severe pain had been suddenly developed in the lower part of the abdomen, had increased for a time, then subsided for several days, only to return accompanied by a temperature of 104° F., and a general peritonitis with chills and emaciation. Examination had been exceedingly painful, but had shown fullness and fluctuation to the right of the uterus. Rupture of a tube distended by pus being evident, laparotomy had been performed on the next day, the abdominal cavity had been washed, and dense adhesions removed. The hemorrhage from the latter proving uncontrollable, and the author being forced to cut short the operation owing to the state of the patient, he had tamponed the pelvis with iodoform gauze. This had acted as both a drain and a hæmostatic. Thirty-six hours later he had unwisely replaced the gauze by a double current rubber drainage tube, and had washed out the abdominal cavity again through it. If he had closed it at once the patient would probably have recovered. There had been no odor. After some hours the pulse had become very feeble, but had been restored by raising the foot of the bed and irrigating the abdominal cavity with a warm solution of chloride of sodium (1 per cent.). On the third day the wound had begun to show an odor, and from that time on became increasingly fetid, although irrigation had been continued without intermission. The patient had died on the fifth day. The only pathological

change found at the autopsy had been diffuse nephritis; the abdomen had been clean and odorless, and the peritonitis decidedly diminished in extent. The foul odor of the washings was inexplicable to him. It was clear, however, that the operation had not been done early enough.

3. In this case a double pyosalpinx and endometritis of puerperal origin had followed a tedious labor eighteen months previously. The distended tube had been ruptured in sexual intercourse. Some vomiting and slight evidences of shock had presented on his arrival at the house. There had been marked tenderness over the entire abdomen, but no evidences of intense general peritonitis. Within two hours he had opened and cleaned the abdomen, removed both tubes, and closed the abdomen without drainage, although peritonitis had begun. Immediate and uninterrupted recovery had followed.

4. In this case, otherwise similar to No. 3, the operation had been done about five hours after the rupture of the greatly distended tubes, and a similar excellent recovery had followed.

In this instance, having found double pyosalpinx, he had advised an operation, but another physician had called such a procedure rash, and had assured the patient of improvement without it. Rupture had occurred three months later, an immediate operation had been declined, and death from general purulent peritonitis had quickly followed.

6. In this case he had used massage of the tubes after the method of Brandt, and had obtained marked improvement at once in the symptoms of the pyosalpingitis, which had followed a recent abortion. Nevertheless, six days later, without apparent cause, there had been a severe chill followed by general peritonitis, which, however, had almost sub-

sided four days later. He had been apprehensive of the final result from the first, especially as the tubes had enlarged rapidly as soon as massage had been suspended (on account of the acute pain caused by it). He had brought an aspirator to the house, intending the next day to take the risk of emptying the tubes *per vaginam*. On the evening of the same day, however, rupture had taken place. He had found the patient three-quarters of an hour later screaming with agony, cyanotic, with a high temperature and a feeble, frequent pulse. Forty minims of Magendie's solution had been given, counsel sent for, and preparations made for an operation. An apparently very rapid improvement which the patient had made had created enough doubt in his mind to make him wait for daylight to work by. In two hours she had begun to sink, and when morning had come, despite free stimulation, an operation was out of the question. The temporary rally made by the patient had also deceived an eminent specialist whom he had called in. The case had occurred in private practice. In a hospital or clinic he would not have hesitated a moment. It was unfortunate that in private practice operators were apt to be overborne by side considerations, such as unwillingness to sacrifice a chance of the patient's having children in the future, even when her own life was in imminent peril. The patient in this case had been only twenty-three years old. An earlier operation would easily have saved her life. He might in the future change his opinion, but with such cases as the foregoing in mind he unhesitatingly advised opening the abdomen in any similar condition, wherever occurring. If the diagnosis proved incorrect, the opening could be closed again, and no harm was done.

He believed the diagnosis of pyosalpinx could be made in most instances. It was found unexpectedly at autopsies quite as often as it was mistakenly operated for. Hydrosalpinx and hæmatosalpinx, ovarian and parovarian cysts, could frequently be distinguished by the history. He had believed for several years that patients with intractable hydrosalpinx should be operated on, since the disease easily became purulent; or, if the tube ruptured, might cause fatal peritonitis. He believed in operating in cases of pyosalpinx without waiting for rupture to occur. The danger was then far less. Health was restored entirely, which never could be done while the diseased tubes remained. The patient was taken out of a condition of constant peril and almost constant suffering. The high mortality which a prominent German operator had ascribed to the operation was mainly due to the fact that the operation was deferred until every other means had been exhausted and the condition of the patient was already critical. Furthermore, in case an exploratory incision showed hydrosalpinx or hæmatosalpinx and the tube was firmly occluded at some point, it should not be left in to undermine the health and jeopardize life. The chance of pregnancy in such a case was nil, the likelihood of absorption very slight, and that of return of the fluid after tapping great. Whether the tube was occluded or not could easily be ascertained by observing whether gentle stroking toward its outlet diminished its calibre. When a tube filled with pus could be emptied by gentle pressure he would advise proper massage (after Brandt's method), rest in bed, and careful tamponing; but he did not meet with such cases often, and believed them comparatively rare. Also when a tube was only moderately dis-

tended (to about the size of the thumb) and no symptoms were given rise to, he did not favor an operation. Such a collection of pus might in time become inspissated, as occurred elsewhere in the body. But women with such a condition rarely consulted a surgeon or submitted to vaginal examination, even if it was proposed, and that was not likely to be done in the absence of symptoms of local distress. Aspiration of distended tubes was safe only when the operator felt sure of very firm adhesions about the site of the puncture. Some very greatly distended tubes due to puerperal infection gave no signs of their presence other than fever and emaciation. An examination should always be made in such cases, and an operation at once resorted to. It might be necessary to make an exploratory incision to distinguish this condition from the ordinary pelvic abscess, in case there were extensive adhesions. It might not be possible without an incision to distinguish it from an ovarian tumor. Massage was a dangerous procedure in any but trained hands. Perhaps its main usefulness was to aid in diagnosis. Despite all he had said, no one was more averse than he to indiscriminate removal of the uterine appendages or more inclined to use every practicable means of saving young women from this degradation.—*N. Y. Med. Journal.*

The Pathogeny and Treatment of the Diseases of the Cervix Uteri.

THE best way to understand the diseases of the cervix uteri should consist in observing and carefully following the course of their pathogenesis. Obstetric traumatism, natural or artificial, open the door to pathogenetic agents of inflammation. Inflammation impedes the spontaneous repair of the lesions. The nature of the tissues and the condition

of the glandular acini insure the persistency of the changes. The changes in the form of the cervix are caused by unilateral or bilateral traumatism, or by muscular spasm. Nervous derangement and repeated congestions establish and increase the deformities. The following deductions are based upon the study of more than a hundred clinical cases and the microscopical examination of sixty fresh anatomical specimens obtained from operations practiced upon the cervix uteri :

1. A general condition which is below the normal causes in the mucous membrane of the female genital apparatus, whether in the virgin or not, a predisposition to inflammation by encouraging passive congestion, and thus favoring excessive secretions. This condition is commonly called simple catarrh. In this catarrh there is no *a priori* inflammation.

2. Inflammation of the cervix uteri follows the introduction of and contact with phlogogenetic agents. Traumatism by means of operations and the parturient state, inflammations of the vagina, etc., prepare the way for these agents.

3. Aseptic traumatism of the cervix are repaired without the occurrence of inflammation, whether the traumatism consists of a simple erosion or a removal of tissue.

4. Septic traumatism do not undergo repair, but give place to persistent deformity, with inflammation, painful cicatrices, repeated attacks of perimetritis, etc.

5. Erosions, with reference to their progress, may be primary or secondary, the former being immediately related to the pathogenetic cause. They may consist of destruction of continuity in the tissue of the cervix with inflammation in the parturient woman, or they may be due to a recent inflammation in the

virgin or the nullipara. The secondary erosions are those which appear upon a surface which is already diseased—that is, upon everted and cicatricial portions of the cervix.

6. Cicatrization of cervical ectropion with erosion cannot take place as long as the tissues remain in a morbid condition. The cervix is changed in consequence of a chronic inflammation which produces changes in the muscular stroma.

7. The treatment, therefore, should be aimed to combat 1. recent erosions; 2. secondary erosions; 3. cervices which are not eroded, but have been diseased for a long time and in which the work of cicatrization has been accomplished.

8. The use of the cautery and of caustics favors superficial cicatrization of the openings of the glandules and the tissues between these openings. An antiseptic anodyne treatment which gives opportunity for spontaneous repair is preferable such as might be afforded by applications of glycerin and iodoform, by irrigations, etc.

9. The actual cautery may cure with greater certainty, since it destroys all with which it comes in contact. It is not free from danger, and is apt to remove the capacity for impregnation.

10. Secondary erosions, as well as the voluminous, deformed, hypertrophied, and cicatrized cervices of which they form a part, are susceptible of cure by plastic or mixed methods of surgery, by means which imply the ablation of the diseased portion and the restoration of the normal form.—*N. Y. Medical Journal.*

The Electrical Treatment of Hydrosalpinx.

THE conclusions which the author has reached from the treatment of a case of hydrosalpinx by electricity and the study of others are as follows :

1. Fever and the inflammatory state are not an absolute contra-indication to the methodical and appropriate application of the galvanic current.

2. Non-suppurative inflammations of the annexa of the uterus may be advantageously treated by the faradaic current, which though favorable in congestion and in the first stage of inflammation, is contra-indicated in confirmed suppuration. Those cases are excluded in which electrical cauterization may open a free passage for pus into the vagina.

3. Galvano-puncture is a valuable method for attaining two ends: 1st, the abortion of an initial phlegmasia, and the encouragement to disappearance of a progressing inflammatory process; 2d, the ready evacuation of collections of fluids.

4. Every inflammatory exudate which manifests itself at the *fornices vaginae* should be treated by galvano-puncture, under suitable precautions.

5. This method will be useful in certain cases of salpingitis or hydrosalpinx, especially if it is likely to release attachments to the abdominal wall.

6. In all operations rigid antiseptic precautions must be observed as to patients and instruments.

7. Two galvano-punctures *per vaginam* with the negative pole into an acute hydrosalpinx will cause a rapid diminution in the intensity of the process, and produce a complete symptomatic cure.—*N. Y. Medical Journal*.

Sterility from Inaptitude for Ovulation and Incubation.

VULLIET (*Journal de Médecine*) :

Inaptitude for ovulation may be relative or absolute. It is absolute if the ovaries are absent or have undergone such organic modifications or morbid alterations that they are deprived of

their functional activity. Amenorrhœa is the evidence of this condition. It is a very frequent symptom, and though there are rare examples in which pregnancy has occurred in such cases, amenorrhœa may be considered in general as an absolute sense of sterility. It may be due to absence of the ovaries, to a rudimentary development of the entire utero-ovarian apparatus, to disease of the ovaries and tubes, to delay in the development of the menstrual function, or to premature disappearance of the same, to excesses, or to obesity, or to some constitutional condition, such as persistent anorexia, tuberculosis, etc. Absence of the ovaries is a rare deformity, and usually coincides with want of development in the entire genital apparatus. A diagnosis of this condition is best made by anæsthetizing the patient in the dorsal position, and exploring by the aid of a sound in the bladder and one or two fingers in the rectum.

Rudimentary development of the ovaries is very difficult of diagnosis during life. One can often suspect it in connection with an undeveloped uterus and general deficiency of physical vigor. Arrested development of the ovaries does not always lead to absolute amenorrhœa; there are sometimes bloody discharges at irregular intervals, with menstrual molimina. Such cases are not insusceptible of successful treatment by some form of dilatation, continued as long as is necessary, or by electricity.

If amenorrhœa is due to tumors, cancer, or tuberculosis of the ovaries, the sterility is incurable if both organs are affected at the same time. If amenorrhœa is due to delay in the establishment of the menstrual function, it may generally be considered that there is some morbid or congenital

condition which causes it if it is delayed beyond the eighteenth year, and such a cause should be carefully sought. If amenorrhœa occurs between the thirty-fifth and fortieth years in a woman who has never conceived, it will in most cases be permanent. Treatment for sterility in such cases will usually be unsuccessful.

Among the disorders of nutrition which most frequently cause sterility is obesity. Menstruation with such women is usually scanty, though the genital organs and the sexual appetite may be well developed. The treatment in such cases may be successful, but it is usually long and tedious. It consists in measures for overcoming obesity, such as massage of the abdominal walls, massage of the uterus, and other measures for improving the activity and the nutrition of the uterine muscle. If sterility is due to constitutional disease, such as the scrofulous, the tuberculous, or the cancerous diathesis, conception is not impossible, though these diseases certainly exercise an unfavorable influence upon ovulation.—*Arch. of Gynecology.*

Treatment of Pelvic Abscesses.

DR. A. McLAREN, in *N. W. Lancet*:

Aside from the alleviation of the distressing symptoms, the treatment of all purulent collections in the pelvis should be surgical. The physical condition of the patient, and also the tendency which the abscess may show to point in any certain locality, should always be taken into consideration when opening pelvic abscesses. A great many of these patients are in a very bad physical condition by the time the abscess is formed and we are called in to operate.

When the physical condition contra-indicates an anæsthetic, an aspiration of the abscess or vaginal section and the introduction of a self-retaining

drainage tube may be all that is necessary, and may even cure the patient. If the abscess be intraperitoneal, high, and of small size, it must, as a rule, be reached through abdominal incision. If the abscess be of medium size, after separating the adherent intestines, the contents may be withdrawn through an aspirator, and, as the sack contracts, drawn up through the abdominal wound and a drainage tube passed either into the sack, or by a counter opening passed through the sack and into the vagina.

The system of through drainage gives the very best of results, in both intra and extraperitoneal abscesses, as far as my own observation goes. When the abscess is extraperitoneal, and due either to the softening of a peri-uterine inflammation, or to the suppuration of a pelvic hematocoele, it may be opened from above without opening the peritoneal cavity.

Making a dissection parallel to Poupart's ligament, the thickened peritoneum may be pushed away from the pelvic wall until the roof of the abscess cavity is opened. Now introducing the finger into the vagina, a pair of dissecting forceps or blunt pointed scissors may be pushed through the abscess wall into the vagina, carrying a long rubber drainage tube through the cavity and out into the vagina: we then have a perfect through drainage, and are enabled to wash out the abscess cavity as often as it may be found necessary. As the cavity contracts and the discharge lessens, the tube may be slowly drawn out through the vagina, allowing the sinus to contract, thus closing the cavity from above.

By this method of through drainage, I have seen of late a number of old pelvic abscesses, that had resisted the ordinary surgical treatment, entirely cured.

Mrs. G., æt. twenty-five, was confined with her first child two years ago. Labor was very difficult, and followed by a post partum hemorrhage. Her attending physician injected about half an ounce of Churchill's tincture of iodine into the uterine cavity. It controlled the hemorrhage, but probably caused the subsequent pelvic abscess. The abscess filled and was opened on three different occasions, only to refill again. Finally the abscess cavity was opened, as I have described, from above, and the long drainage tube carried into the vagina. The abscess cavity was washed out daily with an antiseptic solution; at the end of six weeks the tube was slowly withdrawn and the abscess never refilled. Mrs. G. is now three months pregnant; the operation was performed ten months ago.

A second case, Mrs. W., was seen in consultation. She is forty-seven, the mother of five children, the youngest seven years of age. Following the birth of her last child she had a pelvic abscess which has opened at different times through both the rectum and vagina. She is a chronic invalid, and a great sufferer from her pelvic trouble. The abscess was reached from above by a deep dissection, with separation of the peritoneum from the pelvic wall. The roof of the abscess was opened, and the drainage tube carried through the cavity and into the vagina, as in the previous case. Her recovery has been uninterrupted, and excepting for the contraction of the old pelvic adhesions, is now practically well.—*Archiv. of Gynecology.*

Menorrhagia.

DR. W. H. PETERS (*Medical Waif*):

The causes of menorrhagia are many. It may be due to hemorrhagic diathesis or scorbutic conditions. Again, it may be simply of local origin; for instance,

resulting from metritis, endometritis, subinvolution, submucous and interstitial fibroids, polypi, cancer, etc.

Menorrhagia may also be due to organic heart or liver disease. The proper treatment, therefore, for menorrhagia is the treatment of the condition or disease that produces it. In menorrhagia depending on heart disease we should give digitalis; in hepatic disease we should give the following: *℞. Ammonii chloridi, 3 iii; aquæ, 5 vi. M. Sig: Tablespoonful three times a day.*

Or this: *℞. Euonymin; irisin, aa, gr. xxjv.; pil. aloes. et myrrh, q. s. M. Ft. Pil. No. xii. Sig: One, two or three times a day.*

If the menorrhagia is due simply to a congested condition, or a flabby state of the uterine muscle, we may give the following with decided advantage at the menstrual periods: *℞. Ergotinæ, 3 j; argenti oxidi., gr. iijs; ext. taraxacum, q. s. M. Ft. Caps. No. xv. Sig: One three times a day.*

When a physician is consulted by unmarried women or young girls for menorrhagia, he should first try the above silver and ergotine pill. If this fail and the case be urgent, he should request an examination. The following formula may at times be used with advantage: *℞. Liq. ergotæ purificatus, 5 i. Sig: Half a teaspoonful three times a day.*

Or the following: *℞. Ergotinæ, gr. xlviii; butyr cocoæ, q. s. M. Ft. vaginal or rectal suppos. No. xij. Sig: Insert one or two per day.*

In cases where the menorrhagia occurs in debilitated subjects, women or girls who are pale and flabby, the following prescription will be found of great value, often acting like a charm: *℞. Ext. nucis vom.; ext. cannabis ind., aa gr. v.; quiniæ sulph., gr. xxx. M. Ft. Caps. No. x. Sig: One every three or four hours.*

DISEASES OF CHILDREN.

The Period of Infection in Scarlet Fever.

DR. WHITELEGGE (*Lancet*):

The author believes that there are two periods when the disease is specially likely to be conveyed. First, during the acute symptoms of the first few days; and, secondly, during active desquamation. During the intervening period the likelihood of contagion is much less.

Among seventeen hundred cases, of which exact particulars were at hand, there were two hundred and eighty-eight households in which two or more cases occurred. Neglecting all third or later cases there remained two hundred and eighty-eight pairs of cases. The following table shows the relative frequency of interval between the cases. The day of the attack being reckoned as day 1, the next day as 2, etc. Thus there were on day 1, besides the two hundred and eighty-eight first cases, also sixteen second cases; on day 2, forty-two second cases, etc., as follows in the table:

| Day | Second Cases. | Day | Second Cases. |
|-----------|---------------|-----------|---------------|
| 1..... | 16 | 16..... | 11 |
| " 2..... | 42 | " 17..... | 5 |
| " 3..... | 30 | " 18..... | 3 |
| " 4..... | 19 | " 19..... | 3 |
| " 5..... | 21 | " 20..... | 2 |
| " 6..... | 17 | " 21..... | 5 |
| " 7..... | 18 | " 22..... | 2 |
| " 8..... | 18 | " 23..... | 1 |
| " 9..... | 6 | " 24..... | 0 |
| " 10..... | 6 | " 25..... | 1 |
| " 11..... | 5 | " 26..... | 3 |
| " 12..... | 5 | " 27..... | 1 |
| " 13..... | 5 | " 28..... | 0 |
| " 14..... | 6 | " 29..... | 3 |
| " 15..... | 10 | " 30..... | 1 |

Second cases occurring in the same family on day 1 or day 2 are presumably due to some other cause than infection from the primary case.

The attention is called especially to the sudden drop in the ninth day and the marked rise again on the fifteenth and sixteenth.

Third cases in families are excluded, as it would be impossible to tell to which of the previous cases they should be referred.—*Arch. Pediatrics*.

Phlegmon of the Orbit in a New-born Infant.

DR. DUJARDIN (*Journal des Sciences Méd. de Lille*) reports a case of this rare affection in a child nineteen days of age. The left eye was affected, the lids exhibiting the characteristic erysip- elatous redness. Exophthalmos with complete immobility of the eyeball and chemosis were present. There was general hyperæmia of the conjunctiva, but no pus or constitutional symptoms. The treatment consisted of cataplasms and inunctions of the lids with blue ointment. Two days later the child's condition had become worse; the lids could not be closed, and marked chem- osis was present. After several days fluctuation appeared, and an incision was made from which a large quantity of pus mixed with blood was discharged. On the following day considerable pus escaped from the wound and also from the nose and mouth of the child, being expelled on coughing. Steady improve- ment now set in, and recovery was com- plete five days later.

The causation of the disease was obscure. The mother stated that the child since birth had had a small pus- tule on the lower lid of the eye, and it is possible infection took place through a small abrasion at the time of delivery. Mother had no leucorrhœal discharge.

These orbital abscesses may perforate the lachrymal bone, which is especially thin in the new-born, or may discharge into the antrum. The most dangerous phlegmons occur after erysipelas. If both eyes are affected death always results. The mortality is about 20.5 per cent.—*International Medical Journal*.

Treatment of Acute Simple Bronchitis in Children.

DR. PIERRON (*Journal de Médecine*) :

If acute bronchitis is without complications, its treatment may be limited to hygienic attention, a mild and equable temperature in the bedchamber, rest in bed, and a light diet. If the child is still nursing, it should not be weaned nor the intervals between nursings lengthened; on the other hand, if the child has been recently weaned, it should again be put to the breast. Older children should be given soups, beef tea, milk, and eggs. In some cases the indications will be for an emetic, a laxative, or mild revulsives, in order to stimulate the bronchial secreting function. Should the simple bronchitis show a tendency to persist and to develop into a rebellious bronchial catarrh, powerful revulsives must be used, repeated fumigations must be practised, and mild purgatives and emetics be given every day or every two days. Cod liver oil and other tonics should be administered, and one of the following formulæ: *R.* Syr. ipecac, 15 grammes; syr. ol. terebinthinæ, 30 grammes; decoc. polygalæ, 100 grammes. Teaspoonful every hour.

R. Kermes, 0.30 gramme; syr. rum, 25 grammes; syr. potass. brom., 15 grammes; syr. eucalypti, 30 grammes; infus. violets, 100 grammes. Teaspoonful every hour.

R. Syr. sodii monosulph., 20 grammes; potass. chlor., 2 grammes; aq. comn., 120 grammes. Teaspoonful every hour.

The treatment of acute general bronchitis and capillary bronchitis, when both are uncomplicated, is the same, but it implies constant care and attention. At the beginning energetic revulsives are indicated, but no vesication, emetics, and the general régime of simple bronchitis. Expectorants will be of

service, and by their nauseating effect will favor elimination of morbid products. The following formula will be found serviceable: *R.* Kermes, 0.20 gramme; tinct. digital., gtt. v; tinct. belladonnæ, gtt. x; syr. ipecac, 12.00 grammes; vini malagæ, 20.00 grammes; decoc. polygalæ, 100.00 grammes. Q. S.

Should dyspnœa become urgent, dry cups should frequently be applied, flying-blisters should be used, oxygen should be inhaled, and the atmosphere should be kept moist with suitable medicaments. Inhalations of ether or chloroform may also be used, or of hydriodic ether, hydriodate of ethyl, or the bromide of ethyl. For dyspnœa also the following formulæ are recommended: *R.* Potass. iod., 0.50 gramme; syr. eucalypti, 35.00 grammes; infus. theæ nigræ, 115.00 grammes. Teaspoonful doses every hour.

R. Tinct. lobeliæ, gtt. xv; sodii iodidi, 1.00 gramme; infus. arnicæ, 150.00 grammes. Coffeespoonful every half hour when the cough is violent.

If the efforts at coughing are very violent, emetics will relieve the bronchi and the lungs. The following is recommended: *R.* Tinct. cannabis ind., gtt. x; tinct. belladonnæ, gtt. xii; ammonii benzoati, 0.35 gramme; syr. tolutani, 50.00 grammes; infus. caffèæ, 100.00 grammes. Teaspoonful doses every half hour until the spasms cease.

When the pulse is rapid or very feeble and the fever high, digitalis in suitable doses should be given. If the expectoration is too profuse, six or eight pastils of kermes or of ipecac, or both, may be given daily and four of sulphur. Other medicaments may be given in the form of tar water, sulphur waters, either pure or combined with milk, arsenical waters, and various other tonics. If the difficulty in removing the bronchial secretion is great, in addition to what has

already been mentioned one may prescribe the preparations of ergot and the syrup of sulphate of strychnine.—*Arch. of Pediatrics*.

Etiology of Chorea.

DR. STURGES (*Lancet*):

The author gives an analysis with reference to the etiology of one hundred cases of chorea in children.

It is shown to be a common disorder in London, but not so everywhere. And this striking inequality of geographical distribution is in no correspondence with the variations of rheumatism. According to etiology, chorea is divided into four classes.

1. Chorea intimately connected with rheumatism.

2. Chorea in rheumatic children, but having its immediate cause in physical disturbance.

3. Chorea in nervous children excited by some nervous cause and without rheumatism.

4. Chorea unconnected either with rheumatism or nervous shock.

The relationship between rheumatism and chorea is shown in the following table:

| | | |
|------------------------------------|----|-------------------------|
| Family rheumatism in. | 25 | |
| Personal rheumatism in. | 30 | { 15 near.
15 remote |
| Both family and personal in 5. . . | 5 | { 4 near.
1 remote. |

Of the sixteen cases where rheumatism is remote, nine have for immediate cause distinct nervous shock; seven have no known immediate cause. Twenty-five per cent., or one-quarter, expresses, as nearly as can be reached, the proportion of rheumatic children who get chorea, whether in immediate or in remote connection with their rheumatism.

The nervous relations of chorea may be considered from the point of view both of the individual and his inherit-

ance. As regards the latter, it must be borne in mind that family history goes for much less in children than in adults. Observe how meagre is the family history of the one hundred children as shown in the following table:

(a) Family neurotic connection.

| | |
|--|------------|
| Father insane in. | 1 |
| Mother insane in. | 2 |
| “ had chorea in. | 2 |
| “ hysterical in. | 1 |
| “ epileptic in. | 2 (or 1) |
| “ very drunken in. | 1 |
| “ worried or mentally distressed in. | 3 |
| Brothers or sisters had chorea in. . . . | 3 |
| Grandmother insane in. | 1 |
| Aunt insane in. | 1 |
| Uncle insane in. | 1 |
| Aunt had chorea in. | 3 |
| Cousin had chorea in. | 1 |
| Family neurosis in. | 22 (or 21) |

This table shows that one hundred children taken any where could hardly have fewer unsound near relatives. Much the same is true of the personal histories.

(b) Personal neurotic connections.

| | |
|--|----|
| Chorea had occurred before in. | 29 |
| Reported as of an emotional temperament. . . | 26 |
| “ as showing irritability or change of temper before attack. | 6 |
| “ as irritable during attack. | 2 |
| “ as complaining of headache before attack. | 8 |
| Reported as complaining of hyperæsthesia of forearm. | 1 |

Further research shows that of fifty-five of these children seventeen were by nature irritable and nervous or had become so by change of temper preceding attack; and twenty-five were made choreic by some special nervous disturbance. In all, forty-two. Leaving thirteen of rheumatic or unknown causation.

The result of actual computation shows that, while three-fourths of the cases are altogether apart from rheumatism, much more than one-half (nearly three-fourths) are in close connection with mental shock or overstrain. This accords with the general observa-

tion that chorea prefers the sensitive sex and the sensitive age.

Chorea has two distinct phases. It is first a disorder of the mind and afterwards a disorder of the body. In its earlier stage it needs moral correction. When the motor part of the affection becomes apparent drugs are applicable. The author points out that the mental excitement stage is largely overlooked.

In regard to the starting place and the comparative frequency of choreic movements in different parts of the body the author's table shows that chorea prefers the upper to the lower limbs, and that it selects the hands, one or both, rather than any other part of the body (the face excepted), for its earliest attack, while as between right and left there is no appreciable difference.

There are other points—such as shifting from one limb to another—that cannot be put in tabular form.

They point to no anatomical basis of chorea; no general expression would better convey the facts than to say that the parts which suffer first and most are the same as are used to express emotion, and subjected to the highest, longest, and most complicated training.

Altogether in the sex, age, and temperament, chorea favors in its occasions and exciting causes, in its transient paresis and nervous pains, in its complete, uneven, and practically invariable recovery, even in its modes and stages chorea seems most like hysteria.

Its essential character is an exaggeration of involuntary motility; diminution of the power of the will; the emotional, sensational, and reflex movements are in excess; the voluntary are defective. These words of Dr. Russell Reynolds describe chorea about as well as hysteria.

The practical lesson of the paper is

that chorea is the most preventable of all diseases and the most directly due to ignorance, neglect and want of observation.

The early symptoms of altered temper, disturbed sleep, inattention, and impatience are obvious enough. This early stage is usually not merely untreated by the doctor; it is acutely aggravated by undeserved punishment.

If there were a wider knowledge of the way chorea begins, much of it might be prevented.

The author believes that the system of school work which pushes children forward at a uniform rate, is a fruitful source of chorea, and that much harm and physical injury results from it.

The Relation of Bacteria to Diarrhœal Diseases in Infancy.

DR. L. EMMETT HOLT (*N. Y. Medical Journal*) arrives at the following conclusions:

1. We accept, then, the doctrine that we are concerned most of all, in the gastro-intestinal disorders of infancy, with the development of abnormal bacteria, but as the first step there is a failure of complete digestion and perfect absorption.

2. Mechanical diarrhœa from the presence of foreign bodies, or food which acts as such to infantile digestion, and that resulting from the ingestion of poisonous ptomaines, are probably the only varieties to be excluded from this class.

3. The anatomical changes are those of inflammation of the gastro-intestinal mucous membrane; but the lesions are the results, either directly or indirectly, of the micro-organisms. Since micro-organisms are found in numbers only superficially, except where ulcers exist, it seems most likely that their action is an indirect one through their ptomaines.

4. As to the exact nature of the processes of putrefaction which take place in the intestine, and the bacteria which produce the different forms, we are as yet almost in entire ignorance.

5. One clinical form of diarrhœal disease—viz., true cholera infantum—has many features which point to a specific germ as a probable cause.

To what views of prophylaxis and treatment of intestinal disease does the foregoing discussion lead us? Time will not permit here more than an outline.

Two things are essential to active bacterial growth—the entrance of living germs in numbers, and a proper soil for their development. Prophylaxis must have regard to both these conditions.

Germes are to be excluded by sterilizing milk for all children under two years by absolute cleanliness of bottles and every thing with which the milk comes in contact, and by securing pure air. Tompkins found in Leicester, England, that in one section of the town where diarrhœal diseases were very prevalent, there were from three to six times as many bacteria in the air as in other sections. The water supply was the same for all, and the food not essentially different.

Equally important is cleanliness of the mouth. Van Puteren found in infants suffering from thrush that the number of bacteria in the stomach was forty times as great as when this condition was absent.

To secure a soil unfavorable to bacteria we must have healthy digestion and absorption. This means a great deal. To secure it we must, in the first place, build up the infant's constitution; secondly, food suited to the powers of the digestive organs should be given; thirdly, regularity in feeding must be insisted on, and night nursing and feed-

ing stopped as early as possible; fourthly, the stools should be inspected to see whether what is given is properly absorbed; fifthly, all minor derangements should be attended to; sixthly, during the hot summer season the amount of food should be materially reduced, and infants should be allowed water freely.

As to treatment, three distinct indications present themselves:

1. To nourish the patient.
2. To combat the abnormal bacterial growth.
3. To treat the lesions.

All these indications must be considered if success is to be the result of our efforts. The force of the different indications may vary in different stages of the morbid process; thus, early in the disease the second indication may be the most important, while later on the third indication comes into great prominence.

In all stages we have to deal with a very complex process, and its management will never, I think, be reduced to so simple a thing as the discovery of a pathogenic microbe and the giving of its appropriate germicide.

OBSTETRICS.

Antipyrin in the First Stages of Labor.

WE have already alluded to the fact that antipyrin is claimed during the first stages of labor to render the pains less severe, while at the same time not interfering with the progress of labor. Although these claims have not been universally admitted, and we have referred to papers in which the claim is made that it is entirely negative in its action in this respect, some results published by J. O. VAN WINKLE in the *New York Medical Journal*, go far to substantiate them. He refers to several cases in which antipyrin was employed.

The first dose was given when the os was about one-third dilated, except in cases where the pains were very severe from the outset, when it was ordered earlier. Antipyrin, gr. xv, and spt. ammonia, xxx drops, were administered every two hours during the first stage for three doses. The temperature and pulse were noted at the time the first dose was administered, and every hour thereafter until dilatation was complete. In almost every instance the patient said she felt greatly relieved, and this was evident from her behavior. In some cases the patient would fall asleep for an hour or so after the first or second dose. Incidentally it was noticed that the temperature fell from half a degree to a degree and a half Fahrenheit. The pulse became somewhat more frequent and the respiration slightly increased. Occasionally, if the pulse was rather rapid before administering the drug, it decreased in frequency. From statistics as to the duration of labor in cases where it was not employed, and where it was employed, it would seem that antipyrin does not increase the duration of labor, but on the contrary, tends to lessen the first stage on an average of about half an hour, while the second stage remains practically the same, and in no case was there any injury done the mother or child. The author claims that antipyrin very materially lessens the severity of the pains during the first stage of labor, and has never given rise to any alarming symptoms, this immunity doubtless being due to the fact that in its administration it was always combined with a stimulant.—*Therapeutic Gazette*.

A Hitherto Undescribed Cause of Delay in the Second Stage of Labor.

At the recent meeting of the Buffalo Obstetrical Society, Dr. A. H. BRIGGS

read a paper with the above title (*Buffalo Medical and Surgical Journal*):

This subject was suggested to him by observations at the bedside. In the divisions of the stages of labor, he gave the second stage as the period from complete dilatation of the os to final delivery. In anatomical studies of the uterus, it had been observed that its circular structure was composed of two kinds of fibres, viz.: circular and longitudinal. The longitudinal fibres belonged to the upper portion of the womb, while in the cervix they were more circular, the two being somewhat interblended.

The phenomena of dilatation consisted in the drawing back of the circular fibres by the longitudinal ones, not alone from the expulsive pressure of the uterine contents, but from contraction of the muscular fibres of the womb, due to the muscular action named. Taking that for granted, one could easily see why dilatation occurs without much pressure of the head. In some cases as the edges grow thinner, they grasp the head like a band or cord, and finally can be felt sliding over it. This produces an agonizing pain, just at the moment the os slips over the head; then there is repose, so far as active contractions of the uterus are concerned, and the patient, too, is quiet.

The speaker called particular attention to the part the longitudinal fibres play at this time. He believed that in many cases of primiparæ, the os grasped the neck just at this period of labor, holding it tightly, which was one cause of delayed second stage.

When watching for the advance of labor at this time, he had been struck with the great delay, notwithstanding active pains, as well as other evidences of apparently progressive labor.

In relating a case where he had met

substantially this difficulty, he had gone to fetch his forceps, but, on returning, he found the woman had delivered herself. He had not observed this phenomenon stated in the literature of the subject as a cause of delay in this stage of labor, but was convinced from his observations that it was to be regarded as a factor in, or cause of delay many times.—*Therapeutic Gazette.*

Relationship Between Neuralgia and Abortion.

DR. A. D. LEITH NAPIER, in a consideration of this subject, says :

1. Neuralgia and abortion are frequently associated.

2. In certain cases of "habitual abortion," neuralgia invariably manifests itself as the first symptom, attacking cranial or spinal nerves remote from the uterus.

3. If treatment relieves the pain there is a strong probability that uterine disturbance will not commence, or, if already there have been contractions, these will cease.

4. Neuralgia, while perhaps most common in the rheumatic, occurs in different types of patients: in the anæmic, dyspeptic, or mal-nourished; or in the over-fed, indolent and plethoric.

5. Fetal death is sometimes the evident cause; sometimes evidently results from the reflex irritation associated with the neuralgic pain.

6. Acute neuralgias occurring in pregnancy may not in any way interrupt healthy gestation.

7. When severe facial, cervical, or other neuralgia yields to treatment, even although the embryo is dead, uterine contractions and emptying will not occur for days, perhaps weeks.

8. The trifacial, occipital, and cervical nerves are most commonly affected;

but brachial, intercostal, lumbar and sciatic neuralgias are also met with.

9. Acute gastric irritation is associated with neuralgia and abortion. Pregnancy sickness, although very severe, but seldom causes miscarriage; but gastrodynia, which is sometimes accompanied by salivation and a constant feeling of nausea and depression, not infrequently precedes acute neuralgia, which evidently causes uterine irritation, and ends in abortion.

The deduction is, that there are two sets of nerve affections in pregnancy: 1, those of simple localized peripheral origin, as neuralgia from dental caries, from vesical, rectal, or pelvic pressure, which seldom go on to cause uterine neuralgia of such degree as will end in contractions sufficient to cause premature expulsion of the embryo; and 2, neuroses, which owe their origin to general conditions of constitutional disturbance, and which may manifest themselves by appearing as acute neuralgia or cranial or spinal nerves.

In the latter class the inhibitory action will sooner or later be gravely affected, and the normal excito-motor conditions will speedily involve the organ upon which physiological action has exercised its paramount influence, that is to say, a patient, suffering, for example, from chronic rheumatism, will be apt to abort not only from chronic rheumatic endometritis, but from the central neural disturbance due to the blood deterioration. Neuralgia occurring in such a case may be facial or intercostal, but speedily becomes uterine, not from peripheral, but from central causes of irritation. A few hours after the commencement of an acute rheumatic neuralgia in the head and neck, sharp ovarian and uterine irritation is experienced; contractions, sharp, and in muscular waves, accompanied by hem-

orrhagic effusions, may very shortly terminate the pregnancy.

I have found that the successful control of neuralgia in pregnancy demands attention to one or two points. If the patient is anæmic, quinine given alone in 10-grain doses twice daily, or, still better, with a grain of opium with each dose is best as an immediate sedative, and free doses of arsenical solution are most useful as inter-attack treatment. But when the patient is plethoric, especially if there is a gouty or rheumatic tendency, chloride of ammonium, 10 to 15 grains, every two, three, or four hours, with bromides of ammonium or sodium, opium, and aconite, or with veratrum, will answer best. *Viburnum prunifolium* is of the greatest value in some cases, and certainly ought to be given as soon as the uterine pains are felt. The *Liq. Caulophyllum et Pulsatillæ Co.* promises to prove valuable as a uterine and ovarian sedative, and might be given either alone, or with *viburnum* in lessened doses, as soon as acute pain has subsided. Other patients will do well with antipyrin, gr. xv, every two or three hours, or iodides and alkalies; and for some I conceive a course of baths at Kissingen, Kreuznach, Ems, or Wiesbaden, will do more good than any drug. But we must act promptly and dose liberally during the acute attack of neuralgia.—*Edinburgh Medical Journal*.

Treatment of Puerperal Endometritis by Means of the Curette.

DR. EGBERT H. GRANDIN (*Medical Record*) urges the use of the dull curette in septic endometritis, to clear the uterus of all particles which are undergoing decomposition, whether partially loose, partially adherent to the superficies, or extending to the muscularis.

The author believed that the majority of accoucheurs, the world over, clung to

the intra-uterine douche. Some objections to this method were that the douche had frequently to be repeated for days, and might then prove inefficient; that the antiseptic agent might prove toxic; that there might be reintroduction of septic matter. The use of corrosive sublimate had been forbidden in some European maternities because of its danger. Dr. Grandin has not introduced a bichloride of mercury solution into the uterus for two years.

In the author's opinion the dull curette would often replace the douche, and at the same time answer all the indications. The dull curette was harmless when used with care. The practitioner should be as skillful in its use as with forceps or the irrigation tube. As soon as fetor of the lochia appeared, it was necessary to carefully differentiate its source. If it were from the vagina, a douche with boiled water or an antiseptic solution would cause the fetor to disappear. If after a few hours it reappeared, the author would administer an intra-uterine douche. If the fetor again returned he instituted active treatment. He would place the patient in Sims' position, insert the speculum, fix the cervix with the tenaculum, introduce the curette bent to the correct angle, thoroughly scrape the interior of the uterus, and finally give another douche.

Constipation in Pregnancy.

C. B. HORRELL, M. D., Colchester, Ill., says: After a careful trial of Acid Mannate, I have no hesitancy in recommending it as a safe and reliable laxative. For ladies *enceinte*, it is indeed quite palatable and effective. In the temporary hemorrhoids sometimes following parturition, my patients invariably acknowledge relief after one or two doses.

PUBLISHERS' DEPARTMENT.

The Infant Food Problem Solved.

During the past twenty-seven years Messrs. REED & CARNRICK have frequently invited the medical profession of this country to visit their laboratory and witness the production of their various preparations, and, in a circular issued about a year ago they offered to pay the expenses of any physician from New York to Goshen and return. Since that time they have had the pleasure of exhibiting to a very large number of practitioners and several chemists of the highest standing, every step in the manufacture of their Food Products. They believe, and with good reason, that theirs is the only house in this country that has thus invited the profession to their laboratories, for this or any other purpose. A physician should never be asked to prescribe or recommend a food, or any pharmaceutical product, the composition or process of manufacture of which is kept secret. Messrs. Reed & Carnrick are confident that they are giving the Infant Food Problem more careful study, and are expending more money in the perfection of machinery for this purpose than any other concern, and they are calling to their aid the best physiological chemists and practitioners in this country and Europe. They believe that their "Soluble Food" is the best food that can ever be artificially produced for a child from eight months to two years of age, and they are also firm in their belief that it is the best food now in the market made for children. They have, however, recognized the fact that nature intended that infants, from birth to the eighth month, should have milk alone; therefore they have studied this problem incessantly for the past year, and have experimented most carefully with a view to producing a food for infants that should closely resemble human milk in composition and digestibility, and should be made wholly from cow's milk. They have been largely aided in perfecting this new product by Professor Attfield of London and by several eminent physiological chemists in this country.

This, their latest preparation, will be presented in the form of a powder, and will, in composition, be almost identical with human milk. It is made wholly from cow's milk, with the exception that a portion of the milk fat is replaced by cocoa butter. This substitution was

made by the advice of Professor Attfield after he had practically tested it with a number of infants. Cocoa butter resembles fat milk more closely in composition than any other fat, and will keep perfectly. In this new Infant Food product the casein of the milk and also the fat are partially digested, and the remaining portion of undigested casein is left light and flocculent like the casein of human milk. They are confident, and the best physiological chemists agree with them, that this preparation is the nearest approach to human milk that can ever be produced and remain permanent. This new product is not intended to supplant Soluble Food, but is more especially designed for use during the first six months. This product will be placed on the market in May, and will be called "Lacto-Preparata." Samples will be sent to any physician upon request.

Mineral Waters for Medicinal Use.

The newspaper war about artificial mineral waters, lately started by Carl Schultz, proves the old adage about some kinds of people falling out. By a peculiar kind of logic he seeks to prove that all artificial Vichy but that made by himself is not according to the analysis of the genuine, but he evidently forgets that all artificial Vichy lacks the most important ingredients of the natural water, such as iron. The question arises that when physicians desire the beneficial effects of Vichy, why should they order any but the genuine?

Baker's Chocolates and Cocoa.

In these days, when food adulteration is so common, it is a comfort to find an article for the table that is thoroughly reliable. Walter Baker & Co.'s breakfast cocoa is eminent in this limited class. No chemicals are used in its manufacture, and it is absolutely pure. It forms, moreover, a delicious and healthful drink, as refreshing, and more nutritious, than tea or coffee, and free from the injurious effects that those beverages sometimes produce. And it is very cheap withal. The house of Walter Baker & Co. has maintained for more than 100 years a great and honored reputation by the excellence and purity of its manufactures.



THE DENTIST'S SOFT TEMPERED STUB STEEL ROUND

NERVE BROACHES.

OLOF JOHANSON,

PATENTEE AND SOLE MANUFACTURER,

No. 1 MAIDEN LANE,

NEW YORK.

OLOF JOHANSON,

DENTISTS' NERVE BROACH,

Patent No. 251,598. Patented Dec. 27, 1881.

Postage paid to any part of the United States and Canada.

Since patenting these Broaches, I have improved them by making them cylindrical instead of conical, permitting of a more distinct barb at the point, also the permanent attachment to each Broach of a brass stem of convenient size and length for handling. Dentists who have examined these improved broaches, and are using them, say they are perfection and far superior to any broach made, being so finely tempered, they never break in the nerve canal as is so often the case with those usually made.

By recent improvements the Broaches are made in four sizes. For Sale by all Wholesale Dealers only.

Note following from some of the most prominent Dentists in the United States.

The undersigned Dentists, state that they are familiar with all the various kinds of Dental Broaches manufactured; that they are acquainted with and have used the Broach invented, patented, and manufactured by OLOF JOHANSON of New York City; and that they consider said Broach superior to any known to them, and use it in preference to all others.

Norman N. Kingsley, No. 25 West 27th Street, New York, in practice 29 years.

E. S. Woodward, No. 361 Fifth Avenue, " " 20 "

George F. Schaffer, No. 44 West 34th Street, " " 17 "

John B. Rich, M. D., No. 12 East 22d Street, " " 43 "

William A. Dwinelle, M. D., No. 27 West 34th St., " " 41 "

A. S. Northrope, No. 44 West 4th Street, " " 20 "

N. Malon Beckeirth, No. 125 West 42d Street, " " 42 "

E. Todd, No. 47 East 29th Street, " " 12 "

W. D. Tenison, No. 45 East 28th Street, " " 19 "

M. M. Maltby, D. D. S., No. 32 East 24th Street, " " 14 "

W. A. Bronson, M. D., No. 8 East 34th Street, " " 30 "

C. E. Francis, D. D. S., No. 33 West 44th Street, " " 21 "

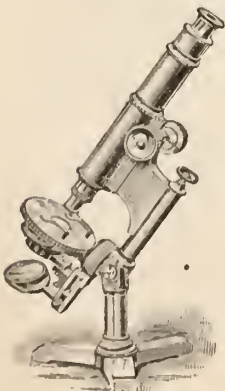
Spiral Handle.—I can furnish these Broaches with my new Spiral Handle, thus giving a flexible and pliable Handle that can be bent to any shape and be of great use to the operator.

Send all orders to

OLOF JOHANSON,

No. 1 Maiden Lane,

NEW YORK CITY.



BAUSCH & LOMB OPTICAL CO.,

MANUFACTURERS OF

Microscopes, Photographic Lenses, and
other Optical Instruments,

FACTORY AND OFFICE:

531 to 534 North St. Paul Street,
ROCHESTER, N. Y.

BRANCH OFFICE:

48 & 50 Maiden Lane, New York.

Catalogue Free.

FELLOWS' HYPO-PHOS-PHITES

(SYR : HYPOPHOS : COMP : FELLOWS)

Contains *The Essential Elements* to the Animal Organization — Potash and Lime ;

The *Oxydizing Agents* — Iron and Manganese ;

The *Tonics* — Quinine and Strychnine ;

And the *Vitalizing Constituent* — Phosphorus,

Combined in the form of a syrup, with *slight alkaline reaction*.

It Differs in Effect from all Others, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

It has Sustained a High Reputation in America and England for efficiency in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs, and is employed also in various nervous and debilitating diseases with success.

Its Curative Properties are largely attributable to Stimulant, Tonic and Nutritive qualities, whereby the various organic functions are recruited.

In Cases where enervating constitutional treatment is applied, and tonic treatment is desirable, this preparation will be found to act with safety and satisfaction.

Its Action is Prompt; stimulating the appetite and the digestion, it promotes assimilation, and enters directly into the circulation with the food products.

The Prescribed Dose produces a feeling of buoyancy, removing depression or melancholy, and hence is of great value in the treatment of MENTAL AND NERVOUS AFFECTIONS.

From its exerting a double tonic effect and influencing a healthy flow of the secretions, its use is indicated in a wide range of diseases.

Each Bottle of Fellows' Hypophosphites contains 128 Doses.

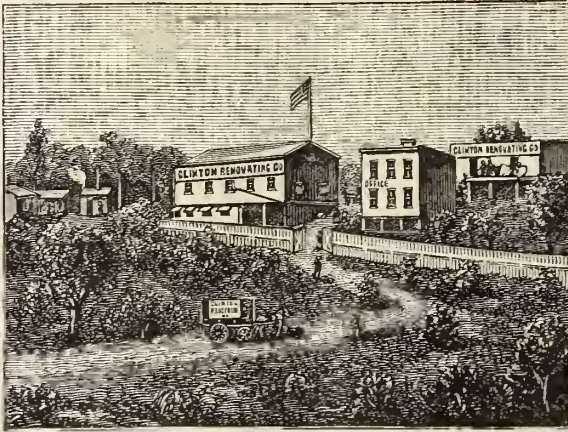
Prepared by JAMES I. FELLOWS, Chemist,
48 Vesey Street, New York.

Circulars and Samples sent to Physicians on application.

FOR SALE BY ALL DRUGGISTS.

CLINTON RENOVATING COMPANY.

OFFICE :
359
 CLINTON ST.
 Cor. Degraw,
 BROOKLYN,
 N. Y.



THE
NAPHTHA
BATH
 USED ONLY BY
 THIS
 COMPANY.

This Company calls the attention of the medical profession and the public to their system of Renovating and Disinfecting by the use of the

NAPHTHA BATH.

This process can be applied to all article of Furniture, Beds, Bedding and Mattresses, without either ripping or taking them apart. Every one who has tried this system pronounces it perfect, and the Company would like you to practically convince yourself of its merits.

Goods called for and delivered in Brooklyn, free of charge.

This Company refers to: Sheppard Knapp & Co., 13th Street and Sixth Avenue, New York.

J. R. Hegeman, Vice-Pres. Metropolitan Life Ins. Co., New York.

H. W. Maxwell, 70 First Place, Brooklyn.

Dr O. C. Gage, 26 West 31st Street, New York ; and many others.

DOCTORS, LOOK HERE!!

FIRE AND BURGLAR PROOF
SAFES
 AT WHOLESALE.

WANTED!

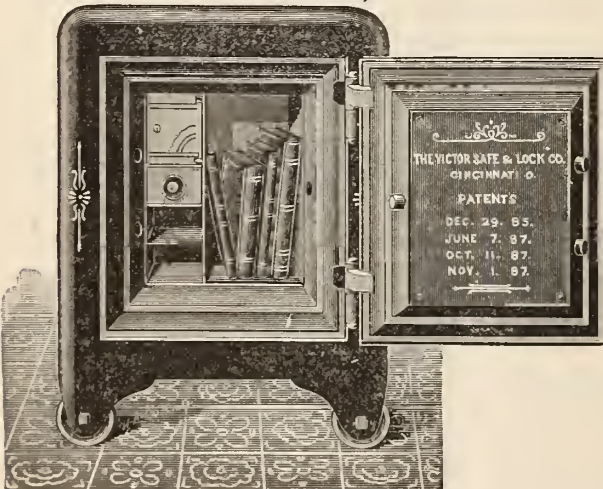
WANTED!

WANTED!

The names and addresses of all Lawyers, Doctors, Merchants, small dealers, Farmers, Housekeepers, and men of every calling

WHO HAVE NO SAFES.

We will furnish you with a first-class Safe, strictly fire-proof, burglar-proof combination lock, beautifully finished and lettered with name, at \$12 and upwards.



DEATH TO HIGH PRICES.

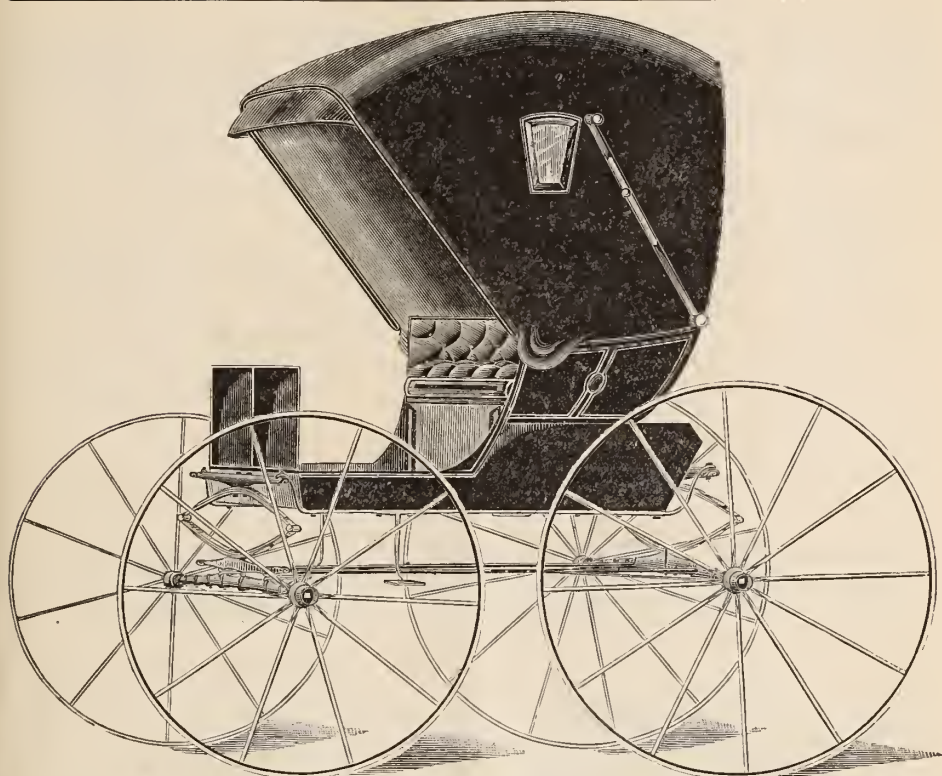
We pay no salaries or commissions to middlemen nor agents. We have no high salaried officers, but practice strictest economy to enable us to sell direct to the user at **LOWEST WHOLESALE PRICES.** The **Victor Safes and Locks** are the latest improved and are manufactured under excellent patents, issued Dec. 29th, 1885 ; June 7th, 1887 ; Oct 11th, 1887 ; and Nov. 1st, 1887.

Every Safe is guaranteed Satisfactory. Our prices are about 80 per cent. lower than any others. Write for our prices and terms at once. Don't fail to mention the Digest.

THE VICTOR SAFE & LOCK CO.,

118 West 7th Street,

CINCINNATI, OHIO.



VALENTINE LINN,
 MANUFACTURER OF
FINE CARRIAGES.

47, 49, 51 & 53 BERGEN STREET, BROOKLYN, N. Y.

Telephone call 760.

*Broughams, Octagons, Coupes, Four and Six Seat Rockaways,
Victorias, Cabriolets, Extension and Canopy Top
Phaetons, and Surreys, Etc.*

PHYSICIANS' PHAETONS A SPECIALTY.

Below will be found the names of a few of the many physicians who have them now in use and will recommend them for their superior qualities. I make five different styles of them. Catalogues and Price Lists will be furnished on application.

Dr. Henry Armgardt, 317 Leonard St., Brooklyn, N. Y.

| | | | |
|----|---|----|----|
| 44 | E. S. Bunker, 117 St. Johns Place, | 44 | 44 |
| 44 | John Byrne, 301 Clinton St., | 44 | 44 |
| 44 | Wm. M. Butler, 507 Clinton Ave., | 44 | 44 |
| 44 | C. M. Bellows, 442 Nostrand Ave., | 44 | 44 |
| 44 | N. M. Carter, 499 Washington Ave., | 44 | 44 |
| 44 | E. Eltinge, 2 Verona Place, | 44 | 44 |
| 44 | George Fowler, 645 Marey Ave., | 44 | 44 |
| 44 | William Gilfillan, Rensen & Henry St., | 44 | 44 |
| 44 | E. Hilton, 201 South 8th St., | 44 | 44 |
| 44 | H. J. Hesse, late Coroner, 163 Bushwick Ave., | 44 | 44 |

| | | |
|---|--------------------------------------|-----------------|
| " | M. A. D. Jones, 163 Dekalb Ave., | brooklyn, N. Y. |
| " | Chas. N. D. Jones, 163 Dekalb Ave., | " " |
| " | Chas. Jewett, 307 Gates Ave., | " " |
| " | Geo. C. Jeffery, 304 Jefferson Ave., | " " |
| " | J. C. Lester, 406 Clinton St., | " " |
| " | Nathan Matson, 415 Green Ave., | " " |

Dr. William Matson, 415 Green Ave., Brooklyn, N. Y.

John A. McCorkle, 149 Clinton St.,
John Merritt, 22 Lafayette Ave.,
Wm. C. Murray, 436 Lewis Ave.,
C. H. Muncie, 363 Tompkins Ave.,
N. J. Preston, 98 Lafayette Ave.,
Frank W. Rockwell, 6 Lafayette Ave.,
H. B. Smith, 131 Fort Green Place,
A. Sanford, 345 Tompkins Ave.,
James Sweeney, 192 North 6th St.,
C. B. Schlatter, 158 Seventeenth St.,
Chas. T. Schmidt, 73 Stagg St.,
James J. Terhune, 171 Adelphi St.,
William Watersworth, 493 Franklin Av.,
Walter L. Ranney, 14 West 32nd St., N. Y.
F. W. Knapp, Orange, N. J.
W. W. Heberton, Orange, N. J.

"The Ideal Lustre"

Is a Peculiar Brilliancy of the Teeth,
combined with a
Ruddy Healthfulness of the Gums,
by which you can at once detect the user of the



"IDEAL" IN { NAME. NATURE. RESULTS,
as slight familiarity will prove.

Recommended by Prominent Dentists everywhere, among them Dr. T. B. Arnold, 127 W. 34th St., N. Y., writes: "It has no equal for Polishing the Teeth and Hardening the Gums."

Dr. C. H. Bartlett, a noted dentist of St. Louis, calls it: "The Best thing ever offered to the public as a cleansing agent for the teeth."

Adopted in Hospitals for its cleanliness and freedom from infectious results; as a fresh polisher can be used every time at slight expense.

Its Economy. Holder (imperishable) 35 cents. Polishers only need be renewed. 18 (boxed) 25 cents. Dealers or mailed.

HORSEY MFG CO., Utica, N. Y.

TO ADVERTISERS!

For a check for \$30 we will print a ten-line advertisement in One Million issues of leading American Newspapers and complete the work within ten days. This is at the rate of only one-fifth of a cent a line, for 1,000 Circulation! The advertisement will appear in but a single issue of any paper, and consequently will be placed before One Million different newspaper purchasers; or FIVE MILLION READERS, if it is true, as is sometimes stated, that every newspaper is looked at by five persons on an average. Ten lines will accommodate about 75 words. Address with copy of Adv. and check, or send 30 cents for Book of 256 pages.
GEO. F. ROWELL & CO., 10 SPRUCE ST., NEW YORK.

We have just issued a new edition of our Book called "Newspaper Advertislug." It has 256 pages, and among its contents may be named the following Lists and Catalogues of Newspapers:—
DAILY NEWSPAPERS IN NEW YORK CITY, with their Advertising Rates.

DAILY NEWSPAPERS IN CITIES HAVING more than 150,000 population, omitting all but the best.
DAILY NEWSPAPERS IN CITIES HAVING more than 20,000 population, omitting all but the best.

A SMALL LIST OF NEWSPAPERS in which to advertise every section of the country: being a choice selection made up with great care, guided by long experience.

ONE NEWSPAPER IN A STATE. The best one for an advertiser to use if he will use but one.

BARGAINS IN ADVERTISING IN DAILY Newspapers in many principal cities and towns, a List which offers peculiar inducements to some advertisers.

LARGEST CIRCULATIONS. A complete list of all American papers issuing regularly more than 25,000 copies.

THE BEST LIST OF LOCAL NEWSPAPERS, covering every town of over 5,000 population and every important county seat.

SELECT LIST OF LOCAL NEWSPAPERS, in which advertisements are inserted at half price.
5,472 VILLAGE NEWS-PAPERS, in which advertisements are inserted for \$12.15 a line and appear in the whole lot—one half of all the American Weeklies

Book sent to any address for **THIRTY CENTS.**



VACCINE VIRUS.

*Pure and Reliable Animal Vaccine
Lymph, Fresh Daily.*

LIBERAL TERMS. SEND FOR CIRCULAR.

10 Ivory Points.....double charged, \$1.00
10 Quill Slips (half quills).....double charged, 1.00
Orders by Mail or Telegraph promptly dispatched.

NEW ENGLAND VACCINE CO.,

Chelsea Station, Boston, Mass.

WM. C. CUTLER, M. D.

J. F. FRISBIE, M. D.

CHAS. R. AVERY,

PHARMACIST,

447 COURT ST., Cor. 4th PLACE,

BROOKLYN, N. Y.

Prescriptions carefully compounded.

PARKE, DAVIS & Co.'s AND SQUIBB'S
PREPARATIONS IN STOCK.

Telephone Call, 1023.

CHARLES DENNIN,

Druggist & Apothecary

FIRST PLACE,

Cor. Court St.

BROOKLYN, N. Y.

TELEPHONE CONNECTION.

SQUIBB'S PREPARATIONS DISPENSED

CELERINA

NERVE TONIC, STIMULANT AND ANTISPASMODIC.

FORMULA.—Every Fluid Drachm represents FIVE grains EACH—Celery, Coca, Kola, Viburnum and Aromatics.

INDICATIONS.—Loss of Nerve-Power (so usual with Lawyers, Preachers, Writers and Business Men), Impotency, Spermatorrhea, Nervous Headache, Neuralgia, Paralysis, Hysteria, Opium Habit, Inebriety, Dyspepsia, and ALL LANGUID conditions of the System.

Indispensable to restore a patient after alcoholic excess.

DOSE.—One or two Teaspoonfuls three or more times a day, as directed by the Physician.

LIQUID IRON-RIO

Palatable and easily assimilated. Does not produce Nausea, nor irritate the Stomach. Does not Cause Headache, nor Constipate. Does not Stain the Teeth. It is so Acceptable to the Stomach that its Use is Admissible when all other forms of Iron would be rejected. Being so Readily Assimilable, it only requires a small Dose.

Each Fluid Drachm contains ONE GRAIN of Iron in a Pleasant and Digestible Form.

DOSE.—One or more Teaspoonfuls as indicated, during or after meals.

S. H. KENNEDY'S

CONCENTRATED EXTRACT OF

PINUS CANADENSIS

DARK.

A NON-ALCOHOLIC LIQUID.

WHITE.

A MOST VALUABLE NON-IRRITATING MUCOUS ASTRINGENT.

INDICATIONS.—Albuminuria, Diarrhea, Dysentery, Night-Sweats, Hemorrhages, Profuse Expectoration, Catarrh, Sore Throat, Leucorrhea, and other Vaginal Diseases, Piles, Sores, Ulcers, Burns, Scalds, Gonorrhea, Gleet, Etc.

When Used as an Injection, to Avoid Staining of Linen, the WHITE Pinus should be used.

RECOMMENDED BY PROMINENT EUROPEAN AND AMERICAN PHYSICIANS.

RIO CHEMICAL CO., St. Louis, Mo., U. S. A.

LONDON.

PARIS.

CALCUTTA.

MONTREAL.

MEDICO-CHIRURGICAL COLLEGE, OF PHILADELPHIA.

SESSIONS OF 1888-1889.

FACULTY.

JAMES E. GARRETSON, A.M., M.D.,
Professor of Oral Surgery and of Clinical Surgery.
WILLIAM H. PANCOAST, A.M., M.D.,
Professor of General, Descriptive and Surgical Anatomy, and of Clinical Surgery.
GEORGE E. STUBBS, A.M., M.D.,
Professor of Surgical Pathology and Clinical Surgery.
WILLIAM F. WAUGH, A.M., M.D.,
Professor of Principles and Practice of Medicine and of Clinical Medicine.
ABRAHAM S. GERHARD, A.M., M.D.,
Professor of General Pathology and of Medical Jurisprudence.
WILLIAM S. STEWART, A.M., M.D.,
Professor of Obstetrics and of Clinical Gynecology.
H. EARNEST GOODMAN, M.D.,
Professor of Principles and Practice of Surgery, Orthopaedics and of Clinical Surgery.

PETER D. KEYSER, A.M., M.D., DEAN,
Professor of Ophthalmology.
THOMAS C. STELLWAGEN, M.A., M.D.,
Professor of Physiology.
FRANK WOODBURY, A.M., M.D.,
Professor of Materia Medica and Therapeutics, and of Clinical Medicine.
SAMUEL B. HOWELL, A.M., M.D.,
Professor of Chemistry.
JOHN V. SHOEMAKER, A.M., M.D.,
Professor of Skin and Venereal Diseases.
EDWARD E. MONTGOMERY, B.S., M.D.,
Professor of Didactic and Clinical Gynecology.
WILLIAM B. ATKINSON, M.A., M.D.,
Professor of Sanitary Science and of Pediatrics.

OTHER INSTRUCTORS.

ISAAC BARTON, M.D.,
Lecturer on Laryngology and Chief Asst. in Throat Clinic.
M. H. CRYER, M.D., *Lecturer on Oral Surgery.*
FRANK FISHER, M.A., M.D.,
Lecturer on Ophthalmology, and Chief Assistant in Eye Clinic.
BENJAMIN T. SHIMWELL, M.D.,
Lecturer on Minor Surgery, and Chief-Assistant in Prof. Goodman's and Garretson's Surgical Clinic.
W. G. McCONNELL, M.D., *Lecturer on Venereal Diseases.*
SPENCER MORRIS, M.D., *Lecturer on Symptomatology*
CONRAD BERENS, A.B., M.D.,
Lecturer on Otolgoy, and Chief-Assistant in Ear Clinic
W. XAVIER SUDDUTH, M.D., F.R.M.S.,
Lecturer on Diseases of the Genito-Urinary System, and Demonstrator of Pathological Histology.
HENRY C. BOENNING, M.D., *Demonstrator of Anatomy.*
E. S. GANS, M.D., *Instructor in Dermatology.*
E. L. B. GODFREY, M.D., *Lecturer on Fractures.*
A. E. ROUSSEL, M.D., *Adjunct to the Chair of Practice*
L. HARRISON METTLER, M.D.,
Lecturer on Electro-Therapeutics.
G. W. McCASKY, M.D.,
Lecturer on Mental and Nervous Diseases.
WILLIAM M. WELSH, M.D.,
Lecturer on the Eranthematia.
CHARLES M. SELTZER, M.D.,
Lecturer on Therapeutic Dietetics.
MAX J. STERN, M.D., *Instructor in Laryngology.*

E. L. VANSANT, M.D.,
Chief-Assistant in Medical Dispensary; Demonstrator of Normal Histology.
JOHN AULDE, M.D.,
Demonstrator of Physical Diagnosis.
J. W. WEST, M.D., *Demonstrator of Gynecology.*
L. GREENBAUM, M.D., D.D.S.,
Demonstrator of Chemistry.
HENRY FISHER, Ph. G., M.D.,
Demonstrator of Pharmacy.
E. GREWER, M.D., *Demonstrator of Practical Physiology.*
T. RIDGWAY BARKER, M.D.,
Assistant in Clinical Surgery.
M. F. LORMAN, M.D.,
Chief-Assistant to the Surgical Clinic.
ROBERT WHARTON, M.D.,
Assistant in Surgical Clinic.
VICTOR G. R. RHEN, M.D.,
Assistant in Pediatrics.
LOUIS VON COTZHAUSEN, M.D., Ph.G.,
Assistant in Medical Clinic.
J. J. TAYLOR, M.D., *Assistant in Medical Clinic.*
W. J. HOLLY, M.D., *Assistant in Surgical Clinic.*
C. FITZPATRICK, JR., M.D.,
Assistant in Surgical Clinic.
W. A. N. DORLAND, M.D., *Assistant in Gynecology.*
A. L. SAVAGE, M.D., *Assistant in Clinical Surgery.*
P. S. DONNELLAN, L.K.Q.C.P., L.R.C.S.I., L.M.,
Assistant in Medical Dispensary.
C. L. FISHER, M.D.,
Assistant in Prof. Pancel's Surgical Clinic.

Every candidate for admission who does not present a degree in Arts or Sciences, a certificate of graduation in a high or normal school, or a certificate of having passed a satisfactory examination of a duly organized County Medical Society, must undergo an examination in English, Latin, Physics and Mathematics. The examination may be conducted by one of the Censors or at the College. Instruction is given by lectures, clinical teaching and practical demonstrations. In the subjects of Anatomy, Pharmacy, Chemistry, Histology and Pathological Anatomy, the usual methods of instruction are largely supplemented by laboratory work. The year begins Sept. 10th, and is divided into a preliminary session of three weeks, a Regular session of six months and a Spring session of ten weeks. Students are divided into three classes according to their time of study and proficiency. Students who have begun their professional studies elsewhere may be admitted to advanced standing upon satisfactory examination in the branches already pursued by the class to which they seek admission. Although the degree of DOCTOR OF MEDICINE is conferred at the end of three years' study, a fourth year is provided which is voluntary (but) attendance upon which will afford the student increased facilities for practical study in clinical medicine, surgery and the various specialties.

ORDER OF STUDIES:

FIRST YEAR:—Anatomy (bones and ligaments), Physiology, General Chemistry, Materia Medica and Pharmacy, General Pathology and Hygiene. SECOND YEAR:—Anatomy (muscles, vessels and viscera), Medical Chemistry, Physiology, Physical Diagnosis, Therapeutics, Clinical Medicine, and Clinical Surgery. THIRD YEAR:—Anatomy (Nervous System), Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgical Pathology, Surgery, Clinical Surgery, Ophthalmology, Dermatology, Syphilis, Diseases of Women, Diseases of Children, Electro-Therapeutics and Forensic Medicine. FOURTH YEAR:—Ophthalmology, Otolgoy, Dermatology, Syphilis, Laryngology, Mental and Nervous Diseases, Diseases of Women, Diseases of Children, Clinical Medicine, Clinical and Operative Surgery, Orthopaedic Surgery, Oral Surgery, Forensic Medicine, Genito-urinary Diseases, Diseases of the Rectum, Diseases of the Female Bladder, Bacteriology, Clinical Microscopy, Preparation of Food for Infants and Invalids and Anaesthetics.

REQUIREMENTS FOR A DEGREE:—Every candidate must be twenty-one years of age, must have attended three or four full terms, one Winter session of which was spent at this school, have passed a written examination upon the prescribed studies of the course.

FEES:—Matriculation, \$5; for the first and second years, each, \$75; for the third year (graduation included), \$100; for the fourth year, to graduates of this school free; to graduates of other schools upon the payment of a matriculation fee, only graduates of a three years school will be permitted to join the graduating class for the degree of this school upon the payment of a fee of \$40. The above fees are conditional upon their being paid before Nov. 1st.

For further information, or Catalogue, address

Dr. E. E. MONTGOMERY, Sec'y, 1818 Arch St., or
Medico-Chirurgical College, Philadelphia, Pa.

THE STROUT

Heating and Ventilating System,

*FOR DWELLING HOUSES, CHURCHES AND
PUBLIC HALLS.*

H. C. STROUT & CO.

(Successors to Strout & Williams),

MANUFACTURERS OF

Strout's Patent Heating and Ventilating Attachments.

OFFICE:

No. 564 STATE ST., Cor. Flatbush Ave., BROOKLYN, N. Y.

The object of the Strout System is to equalize the temperature of buildings and prevent direct drafts and an unequal distribution of hot air, regulating its circulation so that all portions, upper and lower, shall be of uniform temperature and purity.

The system is exclusively adapted to dwelling houses, churches and all public halls and buildings that are heated from either the enclosed or portable furnace. It can readily be applied to any furnace in present use. The practical introduction of the same has invariably shown:

1. Its health-giving qualities in preserving at all times a pure circulation of heated air.
2. It makes the furnace distribute its maximum of heat, with a saving in coal of not less than 25 per cent., and in churches and public halls the gain is even greater.

For further particulars and circulars, address manufacturers as above.

THE COLLEGE AND CLINICAL RECORD.

EDITED BY DR. R. J. DUNGLISON.

MONTHLY. TWO DOLLARS PER ANNUM.

PORTRAIT OF DR. SIMS AND PROF. PARVIN'S LECTURE BOTH GIVEN AS PREMIUMS.

HANDBOOK OF DIAGNOSIS, THERAPEUTICS, Etc.

By Dr. DUNGLISON. Cloth, \$3.50, net; leather, \$4.00, net.

THE PRESENT TREATMENT OF DISEASE.

By Dr. DUNGLISON. Cloth, \$2.50, net; leather, \$3.00, net.

LIBERAL
DISCOUNT

ON ALL

BOOKS,

NO MATTER BY WHOM
PUBLISHED.

—
SEND FOR
COMPLETE LIST.



(FROM HANDBOOK OF DIAGNOSIS, THERAPEUTICS, ETC.)

HYGIENE OF THE SEXUAL FUNCTIONS.

Lecture by Prof. THEROPHILUS PARVIN. 20 cents.

PHOTOGRAPHS OF MEDICAL MEN.

Cabinets, 50 cts.; Panels, 10½ x 17, \$3.00; 20 x 24, \$4.00.

STEEL PORTRAIT OF DR. J. MARION SIMS.

25 cents.

SPECIAL
ATTENTION GIVEN TO
SELECTION OF

Microscopes,
Batteries,
Instruments,
Pictures, Etc.

WM. F. FELL & CO., Publishers, 1220-24 Sansom Street, Philadelphia, Pa.

DIOVIBURNIA

A POWERFUL UTERINE TONIC AND ANTISPASMODIC.

The most **PERFECT** compound **EVER OFFERED** to the **MEDICAL PROFESSION** for the relief of the following female disorders: **DYSMENORRHOEA, AMENORRHOEA, MENORRHAGIA, LEUCORRHOEA, SUBINVOLUTION, PUERPERAL CONVULSIONS, RELAXED** condition of **UTERUS** and **APPENDAGES** and **THREATENED ABORTION**; directing its action in a most remarkable manner to the entire **UTERINE** system as a general tonic and **ANTISPASMODIC**, and in cases of impaired vitality. *Complete Restoration follows its use.*

This happy combination is the result of an **EXTENSIVE PROFESSIONAL EXPERIENCE** **RUNNING THROUGH A SERIES OF YEARS**, in which the constituent parts have been **FULLY TESTED**, singly and in combination, in various proportions, until **PERFECTION** has been **ATTAINED**. We, with the profession, have no regard for secret remedies.

DIOVIBURNIA

is prepared for prescribing exclusively, and the Formula as given, will commend itself to every intelligent physician.

FORMULA.

VIBURNUM PRUNIFOLIUM, VIBURNUM OPULUS, DIOSCOREA VILLOSA, ALETRIS FARI-
NOSA, HELONIAS DIOICA, MITCHELLA REPENS, CAULOPHYLLUM
THALICTROIDES, SCUTELLARIA LATERIFLORA.

Every ounce contains ¾ dram each, of the fluid extract. For further information see bottom of this page.

PALPEBRINE

A TRUSTWORTHY REMEDY IN EXTERNAL EYE DISEASES.

THE forms of disease for which this compound is highly recommended are the following:
Simple Conjunctivitis, Acute and Chronic Catarrhal Conjunctivitis, Vernal Conjunctivitis, Acute and Chronic Blepharitis, Strumous or Scrofulous Conjunctivitis, Marginal Blepharitis and Inflammation of the Lachrymal Sac.

PALPEBRINE is not a *secret* remedy, and in offering it to the general practitioner we give the formula in full. It contains no unknown and untried agents, but is composed of the following well-known drugs which will commend it to the profession at once.

FORMULA AND MEDICAL PROPERTIES:

| | |
|---|--------------------|
| ACIDUM BORACICUM, [an antiseptic] | One per cent. |
| HYDRARGYRUM BICHLORIDUM, [an antiseptic and irritant] | One part in 5,000. |
| TINCTURE OF OPIUM, [nerve tonic, slightly narcotic] | A trace. |
| ZINCUM SULPHURICUM, [an irritant astringent] | One part in 1,000. |
| GLYCERINUM PURUM, [an irritant] | One part in 10. |

EYE diseases are the best and most fruitful field for quackery, and the amount of harm being done by *quacks* and *patent medicines* in eye diseases is fearful to behold. In offering **PALPEBRINE** to the profession we wish to give to the busy practitioner a reliable and safe remedy, easily prescribed, of known qualities and quantities. We are certain after a trial our efforts will be appreciated.

TO any physician, unacquainted with the medicinal effects of **DIOVIBURNIA** and **PALPEBRINE**, we will mail pamphlet containing full information, suggestions, commendations of some of the most prominent practitioners in the profession, and various methods of treatment; also a variety of valuable prescriptions that have been thoroughly tested in an active practice, or to physicians desiring to try our preparations, and who will pay express charges, we will send on application a full size bottle of each free.

DIOS CHEMICAL COMPANY, ST. LOUIS, MO., U. S. A.

CLASSIC—
Unique—



Grotesque—

Romantic



~~~~~for~~~~~  
Publishers~~~~~  
~~~~~Merchants~~~~~  
~~~~~Societies~~~~~  
~~~~~Advertisers~~~~~

P. F. McBREEN
PRINTER

Steam Power
Improved Presses
New Type

61 BEEKMAN STREET
NEW YORK

Estimates Furnished

Established 1872

A Peerless Chemico-Physiological Food and Restorative

Contains all essential inorganic components of the tissues in a semi-solid, easily soluble, crystalline mass,

COMPOSED OF

ACID PHOSPHATE OF CALCIUM.

WITH

Acid Phosphate of Magnesium,
" " " Iron,
" " " Sodium,
" " " Potassium,

Chloride of Potassium,
" " Sodium
Sulphate of Potassium,
and Phosphoric acid.

INDICATIONS:

STOMACH DISORDERS, such as Indigestion, Flatulence Gastric Catarrh, and Poor Appetite, Constipation, etc.

WRONGS OF NUTRITION, as in Scrofula, Rickets, Caries, Marasmus, Delayed Union of Fractures, Necrosis of Tissue, Difficult or Delayed Dentition and Development, etc.

NERVOUS AND GENERAL DEBILITY AND SLEEPLESSNESS, as from Sexual Excess, Venereal Disease, Childbearing, Nursing, Loss of Blood or other fluids, Menstrual and other Diseases of Women, abuse of Alcohol, Tobacco and Narcotics, Protracted Illness, etc.

DEBILITY AND DYSPEPSIA.—*Your preparation of Crystalline Phosphate, I have found to be very excellent in cases of Debility from Nerve Exhaustion. It is a good auxiliary in Gastric and Dyspeptic Troubles, and from my experience I regard it as a reliable preparation.*

T. GRISWOLD COMSTOCK, A. M., M. D., Ph. D., St. Louis, Mo.

Write for Samples and Treatise—Mailed Free. Mention this Journal.

PROVIDENT CHEMICAL WORKS, - - ST. LOUIS, MO., U. S. A.

E. C. RICH CO., Limited, New York City, Eastern Agents,

 **No Chemicals.** 



W. BAKER & CO.'S

**Breakfast
Cocoa**

**Is Absolutely Pure,
and it is Soluble.**

To increase the solubility of the powdered cocoa, various expedients are employed, most of them being based upon the action of some alkali, potash, soda or even ammonia. Cocoa which has been prepared by one of these chemical processes, can usually be recognized at once by the distinct alkaline reaction of the infusion in water.

W. Baker & Co.'s Breakfast Cocoa

is manufactured from the first stage to the last by perfect mechanical processes, **no chemical being used in its preparation.** By one of the most ingenious of these mechanical processes the greatest degree of fineness is secured without the sacrifice of the attractive and beautiful red color which is characteristic of an absolutely pure and natural cocoa.

W. Baker & Co., Dorchester, Mass.

BOUND VOLUMES FOR 1888

Subscribers sending us the twelve numbers for 1888 with \$1, can have them returned handsomely bound. Any missing number will be supplied for twenty cents additional.

THE ANALYST PUBLISHING CO.,

19 Park Place,

New York.

LACTOPEPTINE.

The most important Remedial Agent ever presented to the Profession for

Dyspepsia, Vomiting in Pregnancy, Cholera Infantum, Constipation, and all Diseases arising from Imperfect Nutrition.

LACTOPEPTINE precisely represents in composition the natural digestive juices of the Stomach, Pancreas and Salivary Glands, and will, therefore, readily dissolve all foods necessary for the recuperation of the human organism.

LACTOPEPTINE

IS COMPOUNDED WITH

Gentian, Iron, Strychnia, Bismuth, Quinia, Calisaya, Cinchona and Phosphates,

And various Medications required in general Practice in the form of
ELIXIRS, SYRUPS, LIQUIDS, Etc.

Special Notice to the Medical Profession.

Whenever satisfactory results are not obtained from the administration of **Lactopeptine** we will consider it a favor if such facts are reported to us, for there can be no doubt that substitution of Pepsin or some of the cheap imitations of Lactopeptine has been practised, whenever the therapeutic activity of Lactopeptine is not uniformly demonstrated in its indications. *Send address for our new MEDICAL ALMANAC, containing valuable information.*

THE NEW YORK PHARMACAL ASSOCIATION.

Box 1574.

NEW YORK.

SUCCUS ALTERANS.

(McDADE.)

SUCCUS ALTERANS is a purely vegetable compound of the preserved juices of *Stillingia Sylvatica*, *Lappa Minor*, *Phytolacca Decandra*, *Smilax Sarsaparilla* and *Xanthoxylum Carolinianum*, as collected by Dr. Geo. W. McDADE exclusively for **ELI LILLY & Co.**, and endorsed by Dr. J. MARION SIMS.

SUCCUS ALTERANS continues to gain favor from its remarkable Alterative and Tonic properties, *eliminating specific poison from the blood and increasing the proportion of red corpuscles in anæmic patients* to a wonderful degree; is endorsed by the medical profession and in use by many hospitals of note.

SUCCUS ALTERANS in venereal and cutaneous diseases is fast supplanting Mercury, the Iodides and Arsenic; and is a certain remedy for Mercurialization, Iodism and the dreadful effects often following the use of Arsenic in skin diseases.

SUCCUS ALTERANS is also strongly recommended for its Tonic and Alterative effects in myriad forms of scrofulous disease, and in all cases where anæmia is a factor. Such patients rapidly develop a good appetite, sleep soundly and gain flesh rapidly. Many cases are on record where patients increased ten to twenty-five pounds in weight in a few weeks.

SUCCUS ALTERANS is giving satisfactory results in treatment of *Chronic Rheumatism* and can be used with confidence.

SUCCUS ALTERANS may be given for any length of time, without injury to the patient.

SUCCUS ALTERANS is put up in pint round amber bottles and *never in bulk.*

PHYSICIANS who have not received Dr. McDADE's latest publication, the *MONOGRAPHIA SYPHILITICA*, should send their address, mentioning this journal, and we will mail a copy. It contains a paper, illustrated with colored plates, by Dr. D. H. GOODWILLIE, of New York, on the "Sequelæ of Syphilis," reports of cases in practice and many other valuable papers.

ELI LILLY & CO., Pharmaceutical Chemists,
Indianapolis, Ind., U. S. A.

SUPPLIED BY ALL DRUGGISTS.

THE
AMERICAN MEDICAL DIGEST
A MONTHLY EPITOME
OF
MEDICAL LITERATURE AND SCIENCE.

This old established Magazine is claimed by the Medical Profession to be the most useful, as it is conceded to be the most popular Medical Journal published in America, presenting as it does each month in attractive and readable form, a skillfully condensed Digest of the best current Medical Literature of this Country and Europe, prepared directly for its pages by a corps of well known specialists, under able editorial supervision.

The issues of each year constitute a complete volume, in which is embodied a comprehensive record of the World's Medical and Surgical achievements during that period, concisely stated, carefully classified and extensively illustrated.

It is distinctively

A JOURNAL OF MEDICAL PROGRESS,

replete with information and practical suggestions that are invaluable to the busy practitioner, who would be compelled to search through the technical literature of the whole world to find the same facts outside of its pages.

The Physician by its aid is enabled to save time, labor and expense, in keeping himself thoroughly informed in all that is occurring in his profession which it would be useful for him to know, and its regular monthly appearance precludes all possibility of his falling behind his colleagues in familiarity with the progress of the period.

Its practical value is attested to by nearly Eight Years of successful existence, and the unflinching testimony of its extensive list of subscribers is that

NO DOCTOR CAN AFFORD TO BE WITHOUT IT

who is ambitious of occupying a creditable position in or near the front rank of his profession.

Determined to extend its field of usefulness to the furthest attainable limits, the management of THE AMERICAN MEDICAL DIGEST has at considerable expense brought new influences to bear upon its interests, which, without altering, will, it is believed, considerably expand its scope. All that it has been in the past it will continue to be, while new features will be added from time to time which will increase its utility and value.

Meanwhile the Subscription Price remains

\$2 PER YEAR.

payable in advance to the Publishers,

The Analyst Publishing Company,
**19 PARK PLACE,
NEW YORK.**

INDEX.

MEDICINE.

| PAGE | PAGE |
|--|--|
| Albuminuria—Intermittent and Latent..... 94 | Intestinal Obstruction—Modern Treatment..... 89 |
| Basedow's Disease—Therapy of..... 85 | Liver—Acute Yellow Atrophy of..... 91 |
| Carlsbad Salts—Artificial..... 84 | Medicinal Use of Yeast..... 82 |
| “ “ Substitute for..... 89 | Milk—Anatomical Elements of..... 82 |
| Catarrh of Mucous Membrane—Camphoric Acid in..... 94 | Neuritis—Ascending..... 85 |
| Colic—Mixture for..... 90 | Pancreatic Digestion and Self-Intoxication..... 86 |
| Colorless Stools—Clinical Significance..... 90 | Paraplegia..... 85 |
| Constipation—Habitual..... 89 | Paroxysmal Cough..... 93 |
| Creasote—Formulæ for..... 83 | Pleurisy—Compressed Air in..... 92 |
| Diabetes—Antipyrine in..... 96 | “ Prescription for..... 93 |
| Disease—Communicable, Management of..... 81 | Pneumonia—Hot Baths in..... 93 |
| Exalgine—New Analgesic..... 84 | Rheumatism—Acute Treatment of..... 83 |
| Gouty Men—Causes of Death of..... 81 | Spiced Plaster..... 90 |
| Hæmaturia—Ultzmann on..... 96 | Splenic Murmurs..... 87 |
| Headache and Uric Acid..... 85 | Sulphur in Disease of Alimentary Canal..... 87 |
| Hemorrhage—Byronia Alba..... 82 | “ Fumigation..... 81 |
| Hoarseness—Immediate Relief..... 93 | Typhlitic Disease—Treatment of..... 91 |
| Hydrastis Canadensis..... 93 | Uræmia—Chronic, Morphine in..... 95 |

SURGERY.

| PAGE | PAGE |
|---|--|
| Acne—Treatment of, without Arsenic..... 93 | Patella—Fracture of..... 81 |
| Creolin..... 87 | Plantar Spring for Flat-foot..... 82 |
| Eczema—Iodoform a Cause..... 95 | Psoriasis—Analysis of Cases of..... 93 |
| Electro-magnet in Removing Iron from Eye..... 95 | Salol as a Dressing..... 88 |
| Eye—Electro-magnet in Removing Iron from..... 95 | Skull—Drilling Holes in, for Exploring..... 82 |
| Hearing Restored after 25 Years of Deafness..... 96 | Surgical Instruments—Disinfection of..... 86 |
| Hernia—Inguinal, Radical Cure..... 85 | Syphilis and Eczema Seborrhœicum..... 89 |
| Hernial Sac—Constricted Intestine in..... 83 | “ —Conceptional..... 90 |
| Herpes Progenitalis—Neuralgic..... 94 | Warts—Post Mortem..... 94 |
| Hydrocele—Radical Cure..... 91 | |

DISEASES OF WOMEN AND CHILDREN, AND OBSTETRICS.

| PAGE | PAGE |
|---|---|
| Ahortion—Parvin on..... 92 | Lacing in Russia..... 85 |
| “ Treatment of..... 95 | Leucoplasia of Vulvo-vaginal Mucous Membrane..... 84 |
| Amenorrhœa..... 87 | Leucorrhœa—Parvin on..... 85 |
| Childhood—Albuminuria, with Fever in..... 90 | “ Cervical..... 85 |
| Chlorosis and Menstruation—Relations..... 86 | Lung Diseases in Congenital Syphilis..... 89 |
| Conversion of Face and Occipito-Posterior into Occipito-Anterior Position..... 96 | Medicine—Take your own..... 91 |
| Dentition—Treatment of Eczema of..... 91 | Menstruation and Chlorosis—Relations..... 86 |
| Dysmenorrhœa—Galvanism in..... 88 | Parturient Women—Posture of..... 92 |
| “ Manganese in..... 83 | Porro Cesarian Operation—Statistics..... 96 |
| “ Parvin on..... 85 | Primiparæ—Prevention of Laceration of Perineum in..... 93 |
| Endometritis—Chronic..... 81 | Pregnancy—Salivation of..... 92 |
| Fibroid—Submucous Removal..... 84 | Puerperal Sepsis..... 92 |
| Fetal Monstrosity..... 92 | Uterine Drainage—Iodoform Wick for..... 84 |
| Infantile Tetanus—Chloral and Bromide in..... 91 | Uterus—Early Treatment of Malignant Disease of..... 82 |
| Infants—Hysteria in..... 91 | “ Prolapsus of—Mechanical Treatment..... 87 |
| Labor—Induction of, in Kidney Diseases..... 94 | Vagina—Gas Cysts of..... 83 |
| “ Missed..... 95 | Vulvo-Vaginal Mucous Membrane—Leucoplasia of..... 84 |
| | Woman—Micro-Organisms in Genital Channel of..... 87 |

Specify "Battle" when Prescribing Our Preparations.

Specify "Battle" when Prescribing Our Preparations.

BROMIDIA

THE HYPNOTIC.

FORMULA.—

Every fluid drachm contains 15 grains EACH of Pure Chloral Hydrat. and purified Brom. Pot., and one-eighth grain EACH of gen. imp. ext. Cannabls Ind. and Hyoscyam.

DOSE.—

One-half to one fluid drachm In WATER or SYRUP every hour, until sleep is produced.

INDICATIONS.—

Sleeplessness, Nervousness, Neuralgia, Headache, Convulsions, Colic, Mania, Epilepsy, Irritability, etc. In the restlessness and delirium of fevers It is absolutely Invaluable.

IT DOES NOT LOCK UP THE SECRETIONS.

PAPINE

THE ANODYNE.

Papine is the Anodyne or pain-relieving principle of Opium, the Narcotic and Convulsive Elements being eliminated. It has less tendency to cause Nausea, Vomiting, Constipation, Etc.

INDICATIONS.—

Same as Opium or Morphia.

DOSE.—

(ONE FLUID DRACHM)—represents the Anodyne principle of one-eighth grain of Morphia.

BATTLE & CO.,

CHEMISTS' CORPORATION,

BRANCHES:

76 New Bond Street, London, W.

5 Rue de la Paix, Paris.

9 and 10 Dalhousie Square, Calcutta.

ST. LOUIS, MO.

ESTABLISHED 16 YEARS.

BEWARE OF IMITATIONS.

COLDEN'S LIQUID BEEF TONIC

AN INVALUABLE AID IN MEDICAL PRACTICE

ORIGINAL

COLDEN'S LIEBIG'S LIQUID EXTRACT OF BEEF AND TONIC INVIGORATOR.

LABEL.

ESSENTIALLY DIFFERENT FROM ALL OTHER BEEF TONICS. UNIVERSALLY ENDORSED BY LEADING PHYSICIANS.

This preparation, consisting of the Extract of Beef (prepared by Baron Liebig's process), the best Brandy obtainable, soluble Citrate of Iron, Cinchona and Gentian is offered to the Medical Profession upon its own merits. It is of inestimable value in the treatment of Debility, Convalescence from Severe Illness, Anæmia, Malarial Fever, Chlorosis, Incipient Consumption, Nervous Weakness, and maladies requiring a Tonic and Nutrient. It is quickly absorbed by the Stomach and upper portion of the Alimentary Canal, and therefore finds its way into the circulation quite rapidly.

COLDEN'S LIQUID BEEF TONIC appeals to the judgment of Intelligent Physicians in the treatment of **ALL CASES OF GENERAL DEBILITY.**

By the urgent request of several eminent members of the medical profession, I have added to each wineglassful of this preparation two grains of Soluble Citrate of Iron, and which is designated on the label, "With Iron, No. 1," while the same preparation, **Without Iron**, is designated on the label as "No. 2."

In prescribing this preparation, physicians should be particular to mention "COLDEN'S," viz. "Ext. Carnis Fl. Comp. (Colden)." A Sample of COLDEN'S BEEF TONIC will be sent free on application, to any physician (enclosing business card) in the United States. Sold by druggists generally.

C. N. CRITTENTON, General Agent, 115 Fulton St., New York.

GLENN'S SULPHUR SOAP.

BEWARE OF COUNTERFEITS.

Physicians know the great value of the local use of Sulphur in the Treatment of Diseases of the Skin.

Constantine's Pine-Tar Soap.

THE BEST SOAP MADE.

Has been on trial among physicians for very many years as a healing agent. By far the Best Tar Soap made.

Wholesale Depot, C. N. CRITTENTON, 115 Fulton St., New York. Samples of above Soaps SENT FREE, on application, to any Physician enclosing card.

Carnrick's Soluble Food

IS THE NEAREST APPROACH TO HUMAN MILK THAT HAS THUS
FAR BEEN PRODUCED.

During the past season a large number of Physicians and eminent Chemists visited our Laboratory at Goshen, N. Y., and witnessed every detail connected with the production of CARNRICK'S SOLUBLE FOOD. This invitation to witness our process is continuously open to Physicians and Chemists. All expenses from New York to Goshen and return will be paid by us. The care used in gathering the milk, its sterilization, and the cleanliness exercised in every step, cannot be excelled.

Pancrobilin.

Prepared (in both Liquid and Pill form) from Extract of Pancreas and Bile.

This preparation is designed expressly to increase the digestion and absorption of fats.

We believe that the fat-digesting properties of pancreatine and bile are inseparable, and that without their union in the intestinal tract but little, if any, fat would be digested and absorbed.

PANCROBILIN will be found of great service in *Phthisis and other wasting diseases, Nervous Prostration, Constipation, Inanition, Malnutrition, Intestinal Indigestion* and wherever there is a failure to assimilate fats.

If the skin is first wet with LIQUID PANCROBILIN, the inunction of oils will be greatly facilitated.

LIQUID PANCROBILIN is put up in pound bottles.

PILL PANCROBILIN is put up in bottles holding 100 pills. The coating of the pills will resist acid digestion when given as directed, but will be quickly dissolved in the alkaline secretions of the duodenum.

Phospho-Caffein Comp.

(Granular Effervescing.)

Formula for each dessertspoonful :—

Caffeen.

Acidi Phosphorici ʒiij, grains, ss.

Antipyrin.

Ext. Apii. Grav. dulc. (Celery), ʒiij grains, i.

Sodium Bromide, grains, v.

The satisfactory results produced by PHOSPHO-CAFFEIN COMP. in *Headaches, Neuralgia, Insomnia, Neurasthenia and general Nervous Irritability*, are not due to the effect of any one ingredient, but to the happy effect of the combination. A thorough series of comparative tests have demonstrated the superiority of the above formula over any other in the market.

REED & CARNRICK, New York.

An Important Communication TO PHYSICIANS.

Thirteen years have now elapsed since the introduction of SCOTT'S EMULSION of PURE NORWEGIAN COD LIVER OIL with HYPHOSPHITES of LIME and SODA, since which time its growth and development have been very large, not only in this country but in South America, Great Britain and a large part of Continental Europe, and it has, in a very large degree, supplanted the Plain Cod Liver Oil. Its success is largely due to the happy combination of all its components, making a perfect chemical union, that will not separate for years, which we believe is not true of any other Cod Liver Oil preparation.

The innumerable reports from Physicians, of the brilliant results obtained justifies the statement that in almost every case where Cod Liver Oil is indicated, the combination of Cod Liver Oil with the Hypophosphites as prepared in Scott's Emulsion is infinitely superior.

Physicians who have never tried this Emulsion, or who have been induced to try something else in its stead, will do us the favor to send for sample, and we know they will always use it in preference to plain Cod Liver Oil or any other preparation.

We also call your attention to the following preparations:

CHERRY-MALT PHOSPHITES.

A combination of the tonic principles of Prunus Virginiana, Malted Barley, Hypophosphites of Lime and Soda, and Fruit Juices. An elegant and efficient brain and nerve tonic.

BUCKTHORN CORDIAL (Rhamnus Frangula.)

Prepared from carefully selected German Buckthorn Bark, Juglans Bark, and Aromatics. The undoubted remedy for Habitual Constipation. Send for samples of the above—delivered free.

SCOTT & BOWNE, Mfg. Chemists, 132 & 134 S. 5th Ave., N. Y.

Send for
CLUB RATES on
MEDICAL JOURNALS

To ANALYST PUBL'G CO.,
19 Park Place, N. Y.

THE BEST OF AMERICAN.

Specify

PLANTEN'S CAPSULES.

Known as Reliable over 50 years for "General Excellence."

Established 1836.

H. PLANTEN & SON, 224 William Street
NEW YORK.

SOFT and HARD CAPSULES

FILLED, OF ALL KINDS.

Nine Sizes: 3, 5, 10 and 15 Min. and 1, 2½, 5, 10 & 15 Gram.

NEW KINDS:

WINTERGREEN, APIOL,

Sandalwood, Erigeron, Terebene, Etc.

Improved. Empty, 8 sizes.

Capacity in Grains: 12, 10, 5, 4, 2, 1, ½, ¼.

For taking medicines free of taste, smell, injury to the teeth, mouth or throat.

Rectal, Vaginal, Horse, For Liquids
3 Sizes. 6 Sizes. 6 Sizes. 8 Sizes.

Trial box of all above Empty's, by mail, 25 cents.

Capsules for Mechanical Purposes.

New Articles, and Capsuling Private Formulae, a Specialty. Sold by all Druggists. Samples free.

Specify PLANTEN'S on all orders.

THE BEST ANTISEPTIC.
FOR BOTH INTERNAL AND EXTERNAL USE.

LISTERINE.

Formula.—Listerine is the essential antiseptic constituent of Thyme, Eucalyptus, Baptisia, Gaultheria and Mentha Arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzo-boracic Acid.

Dose.—Internally: One teaspoonful three or more times a day (as indicated), either full strength, or diluted, as necessary for varied conditions.

LISTERINE is a well-proven antiseptic agent—an antizymotic—especially adapted to internal use, and to make and maintain surgical cleanliness—asepsis—in the treatment of all parts of the human body, whether by spray, irrigation, atomization, or simple local application, and therefore characterized by its particular adaptability to the field of

PREVENTIVE MEDICINE—INDIVIDUAL PROPHYLAXIS.

Physicians interested in LISTERINE will please send us their address, and receive by return mail our new and complete pamphlet of 40 quarto pages, embodying:

A TABULATED EXHIBIT of the action of LISTERINE upon inert Laboratory Compounds;
FULL AND EXHAUSTIVE REPORTS and clinical observations from all sources, confirming the utility of LISTERINE as a General Antiseptic for both internal and external use; and particularly
MICROSCOPIC OBSERVATIONS, showing the comparative value and availability of various antiseptics in the treatment of Diseases of the Oral Cavity, by W. D. MILLER, A.B., Ph.D., D.D.S., Professor of Operative and Clinical Dentistry, University of Berlin, from whose deductions LISTERINE appears to be the most acceptable prophylactic for the care and preservation of the teeth.

DISEASES OF THE URIC ACID DIATHESIS.

LAMBERT'S

LITHIATED HYDRANGEA.

KIDNEY ALTERATIVE—ANTI-LITHIC.

Formula.—Each fluid drachm of "Lithiated Hydrangea" represents thirty grains of FRESH HYDRANGEA and three grains of CHEMICALLY PURE Benzo-Salicylate of Lythia. Prepared by our improved process of osmosis, it is INVARIABLY of DEFINITE and UNIFORM therapeutic strength, and hence can be depended on in clinical practice.

Dose.—One or two teaspoonfuls four times a day (preferably between meals.)

Urinary Calculus, Gout, Rheumatism, Bright's Disease, Diabetes, Cystitis, Hæmaturia, Albuminuria, and Vesical Irritations generally.

WE have had prepared for the use of Physicians Dietetic Notes, suggesting the articles of food to be allowed or prohibited in several of these diseases.

A neatly bound book of these Dietetic Notes, each note perforated for the convenience of Physicians in detaching and distributing to their patients. Mailed gratis upon request, together with our latest compilation of case reports and clinical observations, bearing upon the treatment of this class of diseases.

BRIGHT'S DISEASE.

DIETETIC NOTE.—A rigid milk diet has given good results in many cases.

Allowed.—Fish, sweet breads, sago, tapioca, macaroni, baked and stewed apples, prunes, etc.; spinach, celery, lettuce, etc., may be used in moderation in connection with a milk diet, with impairing its effect, and with great comfort and enjoyment to the patient.

Avoid.—Strong coffee and tea, alcoholic stimulants, soups and made dishes.

LAMBERT PHARMACAL COMPANY,
SAINT LOUIS.


June 15, 1889.

No. 6, Vol. VIII.

THE
AMERICAN MEDICAL DIGEST
ISSUED MONTHLY.

A DIGEST OF CURRENT MEDICAL LITERATURE,
ABSTRACTS AND REVIEWS; IN THREE PARTS:
MEDICINE,—SURGERY,—DISEASES OF
WOMEN AND CHILDREN,
AND OBSTETRICS.

PART I.
MEDICINE.

 Address all communications on Advertising, Subscription and Editorial business, Books for reviewing, etc., to the Publishers,

THE ANALYST PUBLISHING CO.,

19 Park Place, New York.

THE NEW HYPNOTIC SULFONAL-BAYER.

SULFONAL was discovered by Prof. Eugen A. Baumann, of Freiburg University, and was first prepared by the Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld.

SULFONAL (Diethylsulfonylmethylmethan) is in the form of colorless prisms, odorless and tasteless, melting at 125.5° C. (258° F.) and has the composition $(C_2H_5)_2C=SO_2$. It is slightly soluble in cold water, but easily soluble in hot water or alcohol.

SULFONAL was first examined as to its physiological and pathological effects by Prof. A. Kast, of Freiburg University, and its hypnotic action was discovered and studied by him.

Since then SULFONAL has been the subject of numerous trials and experiments by many eminent and experienced physicians. Their testimony is unanimously favorable, and the conclusions reached by them are as follows:

SULFONAL is a prompt and reliable hypnotic which in proper doses produces quiet, natural sleep, lasting a number of hours.

SULFONAL has no unfavorable effects on the heart and the circulation, nor on the temperature, the pulse, or the respiration.

SULFONAL produces no disagreeable secondary symptoms; the patients with very few exceptions awake from their sleep feeling strong and greatly refreshed.

SULFONAL does not interfere with the process of digestion.

SULFONAL is a hypnotic, and not a narcotic; it acts by giving rest to the cells of the cerebral cortex, thereby causing sleep.

SULFONAL does not create an unconquerable desire for its repeated use; there is no danger of a SULFONAL-habit. Neither is it necessary to increase the dose after long-continued use.

SULFONAL is best administered at supper time, dissolved in hot liquids, *e. g.*, a bowl of soup or broth, a cup of milk, tea, coffee, cocoa, etc.

These points will be found to be fully exhibited in the series of contributions contained in our pamphlet, which will be mailed on application.

SULFONAL-BAYER is supplied by us in half-ounce and one-ounce vials.

We prepare 5-grain and 15-grain Tablets of Sulfonal-Bayer. The Tablet form is admirably adapted to the purpose of administering this drug, as when they are placed in the liquids, they disintegrate and are thus received into the system.

We also put up Sulfonal-Bayer in the form of our Soluble Pills, containing five grains each.

THE NEW ANTIPYRETIC PHENACETINE-BAYER.

Phenacetine-Bayer (Para-Acetphenetidine) is a white, glossy, crystalline powder, perfectly tasteless, melting at 135° C.—307° F. and has the composition $C_{10}H_{11}NO_2$, $\begin{matrix} O_2C_6H_4 \\ \text{NH} \end{matrix} (CO-CH_3)$.

It is slightly soluble in water, a little more soluble in glycerine, but most freely in alcohol.

Phenacetine-Bayer was first prepared by the Farbenfabriken, formerly Friedr. Bayer & Co., Elberfeld, and is of absolute purity and uniform quality.

Summarizing the superiority of Phenacetine-Bayer over other antipyretics and antineuralgics, the following conclusions are formed.

1. Phenacetine-Bayer is an efficacious antipyretic.
2. It does not develop any disagreeable or noxious after effects.
3. The dose required is half that of Antipyrine.
4. It is perfectly tasteless.
5. On account of its innocuousness and tastelessness, it is a valuable antipyretic both in adults and in children.
6. Phenacetine-Bayer is an important antineuralgic; its effect is more energetic than that of Antipyrine and does not cause lassitude or any other disagreeable symptoms.

Our Pamphlet on Phenacetine-Bayer, containing the valuable testimony of eminent physicians will be mailed on application.

We offer Phenacetine-Bayer in one-ounce vials, or in the form of our Soluble Pills of the strength of two and four grains to each pill.

W. H. SCHIEFFELIN & CO.,
170 & 172 WILLIAM STREET, NEW YORK.

Sole Licensees and Sole Agents for the United States.

Please mention the MEDICAL DIGEST.

CONSTITUTIONAL DISEASES.

Management of Communicable Disease.

DR. E. R. SQUIBB (*Gaillara's Medical Journal*) makes the following points :

1. Susceptibility to disease must precede diseased action ; and the cause of disease, whether communicable or not, must be evolved from this susceptibility.

2. This susceptibility is acquired upon a normal basis of health, which basis has a normal tendency to persist or to resist, and therefore the susceptibility is preventable.

3. This susceptibility varies in degree from insusceptibility up to the highest rate ; and the degree of virulence of contagious virus must coincide with the degree of susceptibility in the production of disease, either factor being impotent without the other.

4. In controlling susceptibility, the virus of contagion and other causes of disease are necessarily controlled.

5. Susceptibility is acquired gradually and imperceptibly through a process of evolution, and its control or management must be through a similar process.

The practical deductions to be drawn from these conclusions constitute the object of this note.

Without any relaxation of the effort for the treatment of communicable disease as it occurs, for the destruction of the virus of contagion, and for the protection of susceptible individuals ; persistent effort should be made in another direction not commonly considered : namely, to lower the rate of susceptibility. In every community physicians see examples of successive generations of well ordered lives in the rearing of offspring in a rational, nearly normal way, and see that in a broad average such always show themselves fittest to survive.

One of the increasing defects of late

generations seems to be want of proper parental discipline and training of the young. Education without power behind it to enforce its teaching, is not sufficient to restrain from injurious inclinations and appetites.

Children are perhaps very generally taught that self denial, and not self indulgence, must be the order of well lived, healthy lives. Yet upon this teaching the cultivation of perverted appetites, and the indulgence of them, is the common practice ; and as candies and cakes take the place of more wholesome natural food, artificial digestives are required, and conditions are gradually established upon which disease is more frequently and more easily acquired, and upon which disease itself is gradually developed and intensified into a more frequent and easy communicability.

The doctrine that disease is penal, and that as a penalty it is always earned and always sure, is not only true upon the grand scale of the past ages, but is a good working hypothesis for the present time. The practical utility of the doctrine is however much weakened by the circumstance that the offences of one generation are entirely or mainly punished in succeeding generations. In this remoteness of causes from their consequences, their connection fails to be realized at its actual value, yet all vital processes are based on absolute justice and truth, and, as is well said by Emerson, the universal law of transgression is retribution.

The Causes of Death Among Gouty Men.

E. CASEY (*British Medical Journal*) has made an analytical study of the cause of death of 2,852 men, taken from the tables of the Collective Investigation Committee; 529 of these were gouty, 1,870 free from the disease, and of the remainder no information was

given upon this point. The presence or absence of intemperance was also studied. The results show that Bright's disease is closely related to the gouty diathesis, and is three times as frequent a cause of death among the gouty as among the not gouty. The influence of gout in the production of heart disease is marked at the middle period of life, but not in later years. Probably the gouty cases of heart disease run their course before old age is reached. Apoplexy shows the same tendency as Bright's disease and heart disease, but in a less degree. There appears to be no relation between gout and cirrhosis, and the same is true of malignant disease and of bronchitis. Pneumonia and allied diseases appear to be less common among the gouty, but more fatal among the intemperate. Phthisis is shown to be a considerably less common cause of death among subjects of gout. Either the gouty habit tends to prevent the development of phthisis, or conversely; or the causes of the two affections are in some degree antagonistic and mutually incompatible. Finally, the gouty habit offers no obstacle to the attainment of old age in temperate men.—*American Journal Med. Science.*

The Anatomical Elements of Milk and the Organization of the Globules.

DR. BÉCHAMP states that, contrary to former opinion, which he holds to be erroneous, it may be shown that milk is not an emulsion, that its globules are not simply fatty matter, but anatomical elements formed in the gland at the same time as the complex fluid in which they float, like the blood globules and leucocytes in liquor sanguinis; that, in short, as stated by Dumas, they are vesicles or cells, furnished with envelopes. Béchamp further shows that milk contains, besides caseine, other coagulable

substances, and that it curdles and ferments spontaneously without the aid of extraneous organic ferments. These globules may be isolated from cream or curds by mixture with diluted alcohol, and subsequent washing in a dilute alcoholic solution of sesquicarbonate of ammonia. The globules may be found intact in the field of a microscope.—*L'Union Médicale.*

The Use of Yeast in Medicine.

THE *Union Médicale* asserts that the idea of employing yeast in therapeutics is not new but merely revived by Dr. HERR, in an article which came out in the *Deutsche Medizinal-Zeitung*, with this exception, that Dr. Herr recommends large doses. Yeast was first used among prisoners and workmen as a cure for scurvy. The author attributes to it a controlling action upon fever.—*Ibid.*

Sulphur Fumigation.

FUMIGATION by the burning of sulphur is the most common method employed by boards of health in the disinfection of apartments in which contagious disease has existed, and the clothing worn by the patients during their illness. In an address delivered by the distinguished chemist, Dr. E. R. SQUIBB, before the Kings County Medical Association, he called attention to the fact that there must always be an abundance of watery vapor in the room to be disinfected; otherwise the sulphurous acid gas generated by the burning of the sulphur is not an efficient disinfectant. The same is true of cheorine gas when used for disinfecting purposes.—*Science.*

Bryonia Alba in Hemorrhage.

PETRESCA, of Beucharest, has been experimenting with the root of bryonia alba, and he finds, according to the

Berliner Klin. Wochenschrift, that it is an especially active hemostatic. He employs a decoction of twenty to twenty-five parts of bryonia root to three hundred parts water, reduced to 150 parts, then filtered. It is mixed with syrup, divided in four parts and taken every half hour. He has also investigated the glucoside "brein," contained in bryonia. The watery and alcoholic extracts, in doses of from fifteen to forty-five grains a day, have proved very useful in metrorrhagia, hematuria, hemoptysis and epistaxis.—*Med. and Sur. Reporter*.

The Treatment of Acute Rheumatism.

DR. A. HARKIN, in *Provincial Medical Journal*, says :

My treatment is of the simplest kind ; the application of a blister, four by three inches, for eight hours to the cardiac region, followed immediately by cotton wood dressing, preceded if in plethoric patients by leeches in the pericardial region, or cupping at the back in the space between the inferior angle of the scapula and the spinal column ; but bleeding is the exception, and this remedy often succeeds in removing all the special symptoms, whether subjective or objective, in the space of twenty-four or forty-eight hours.

I scarcely ever prescribe medicine of any kind, but should the case be prolonged, I do not object to the use of opium, alkalies, or salicin, but I regulate them to their proper place, as adjuvants or handmaids in the treatment, after the cardiac safety has been assured through the use of appropriate remedies. I do not mean to convey, that by the use of this topical remedy I have succeeded in every case, or that it is entitled to the designation of a specific. I am cognizant of several failures in my own and in the practice of others ; I

have not always been able to abort the attack, when accompanied with skin disease, such as peliosis rheumatica, pemphigus, erythema multiforme, or the sequel of pregnancy, or when engrafted upon chronic valvular injury ; but when successful, as it generally is, it effects a perfect cure, a complete recovery, for such an occasion as a single relapse is unknown in its history. I certainly have had three well marked cases of recurrence of the disease after complete convalescence, due to fresh exposure to cold and moisture, but no relapse while under treatment without evident cause.

Formulæ for Creasote.

DR. KEFERSTEIN gives some formulæ in the *Therapeutische Monatshefte*, which have proved useful in his practice. The following formula, he says, gives a clear mixture which tastes and smells decidedly better, and is also cheaper, than the formula suggested by Bouchardat, which contains Malaga wine :

℞. Creasoti, ℥xx; spir. vini rectificat, f 3 vi½; aq. cinnamomi, f 5 liiss; syr. cinnamomi, f 3 vi½. M. Sig. A tablespoonful three times a day, increasing one tablespoonful weekly.

The following formula is for administration of the creasote in pill form :

℞. Creasote, 3 i; powd. althea root, 3 iss; licorice juice, f 3 iss; mucilage of acacia, q. s. ut fiant pil. No. 120; coat with gelatine. Sig. Six pills three times a day.

When there is much cough and diarrhea, the following may be given :

℞. Creasote, gr. xv; acetate of lead, opium (pure), āā gr. ivss; licorice juice, f 3 iss; mucilage of acacia, q. s ut fiant pil. No. 50. Sig. Five pills three times a day. Five pills contain one and one-half minims of creasote.

Instead of giving the creasote in cod liver oil, Keferstein has the following

emulsion made, which can be taken even by children :

R. Creasoti, ℥xx ; solve in olei amygdalæ, f 3 viiss ; pulv. acaciæ, 3 v ; aq. destil, f 3 iiiss. M. ft. emulsio. Adde tinct. aurant. comp., ℥xv ; elæosach. menth. pip., f 3 i. M. Sig. A table-spoonful from two to five times a day.

In the case of children it will be sufficient to make up half the quantity, and give a teaspoonful of it at a time. One tablespoonful of this emulsion contains one and one-half minims of creasote. If the taste of oil is detected, black coffee may be given after it.

The following formula is suitable for giving creasote in the form of drops :

R. Creasoti, ℥xl ; tinct. cinnamomi, f 3 viiss. M. Sig. Fifty drops three times a day, or one-half teaspoonful in a cup of warm milk, added while the milk is vigorously stirred.

Twenty-five drops of this mixture contain one and one-half minims of creasote. Instead of milk, wine or warm sugar and water may be used; but if alcoholic fluids are used they should be cold, while if non-alcoholic fluids are used, the best of which are mucilaginous, they should be warm.—*Weiner Med. Presse.—Medical and Surgical Reporter.*

Artificial Carlsbad Salts.

THE fulsome advertisements of these salts in various ways may have tended to obscure the fact that very cheap and effective artificial preparations can be made. One of these is that suggested by Ziemssen :

Sulphate of sodium, 40 parts ; carbonate of sodium, 6 parts ; chloride of sodium, 1 part.

This should be dissolved in hot water, then the latter evaporated, the remaining salt powdered, and a proper dose of this (one-half teaspoonful) taken in hot or carbonated water.—*Medical Record.*

DISEASES OF THE NERVOUS SYSTEM.

Exalgine, the New Analgesic.

EXALGINE is the name given to a new derivative of the aromatic series, ortho-methyl-acetanilid, recently discovered by Brignonnet, of the Cochin hospital, which has suddenly leaped into extraordinary favor as an analgesic in France.

The name (*ex*, privative, and *algos*, pain) is significant of its qualities. The formula is $C_9H_{11}NO$ (or $C_6H_5.C_2H_3O.NCH_3$), and the substance is one of the three isomeric (para, meta, and ortho) methyl derivatives of acetanilid. It occurs either in fine acicular or long tablet-like crystals, accordingly as it is obtained by evaporation from solution, or by fusion thereafter. It is sparingly soluble in cold water, more soluble in hot water, and extremely soluble in very dilute alcohol, or in water slightly alcoholated. Physiologically it acts very much like analgesine, having, however, more effect upon the sensory and less upon the thermogenic centres than this substance.

Its therapeutic effects are obtained in doses of from 4 to 6 grains, administered at once, or from 6 to 12 grains taken in two doses in the course of twenty-four hours, and are powerfully analgesic, subduing the element of pain in all forms of neuralgia, including visceral.

Like all new remedies of this sort, it is at present on its good behavior, as it were, and it is claimed by MM. Dujardin-Beaumetz and G. Bardet that it has in their hands up to the present exhibited no evil sequelæ, being free from the rash, cyanosis, etc., so frequently observed after the ingestion of antipyrin and acetanilid. Exalgine is eliminated by the urine, upon the quantity of which it exercises a marked effect, acting like the antipyretics of the

same group, diminishing the quantity of the secretion. In diabetes it also diminishes the quantity of sugar eliminated.

Like all of the derivatives of the aromatic series, it is antiseptic and antithermic, as well as analgesic, and possesses the latter quality in a comparatively superlative degree, being more efficient, in doses less than half so great, than antipyrin. The following are the formulæ for its exhibition, as given by M. G. Bardet in *Les Nouveaux Remèdes*.

1. *Antineuralgic Potion of Exalgine*.—℞. Exalgine, 3 i; kirschwasser 3 x; simple syrup, 3 i; distilled water, sufficient to make 3 v.

Dissolve the exalgine in the kirsch water and add the syrup and water. The dose is from 1 to 3 tablespoonfuls in the course of the day.

2. *Solution of Exalgine*.—℞. Exalgine, 3 i; rum, 3 x; distilled water, sufficient to make 3 v.

Proceed as before. The dose is the same as above.

Therapy of Basedow's Disease.

PROFESSOR EULENBURG, of Berlin, speaking on the therapy of this disease, considers it best to place patients in a sanitarium for nervous diseases. Often the most brilliant results are obtained, even in far advanced cases, in establishments and sanitariums located in high altitudes. Even the worst complications with organic heart disease, valve troubles, incomensation, do not present an absolute contra-indication to a sojourn in high altitudes as is generally supposed. In some cases few such altitudes are not well borne, rapid circulation, difficulty in respiration, etc., ensuing. In these cases lower altitudes and sub-alpine climates are preferable.

This climatological treatment is aided by the simultaneous use of balneo-thera-

peutic, diatetic and electro-therapeutic measures. Regarding the first Eulenburg recommends the lighter forms of cold water treatment and carbonic acid baths, and lukewarm carbonic acid and brine baths of a short duration on the other.

As concerns the diatetic measures the Playfair or Weir-Mitchell cure, milk and kumyss cures should be used as in other neurasthenias (for as such Eulenburg regards Basedow's disease).

As to electricity, a mode of treatment especially developed by Eulenburg, hydro-electric baths are to be used. Eulenburg prefers monopolar cathode baths. With this general electrization a local application of electricity may be combined, either after the method of Romain Vigouroux, or after the method of Eulenburg.—*Internat. Klin. Rundsch.*

Paraplegia.

In a man at the Jefferson clinic with paraplegia, following a fall, and with a point of tenderness in the lumbar region over the spine, with some congestion still existing in the cord, Professor BARTHOLOW directed a strong descending stable current to diminish the congestion; 1-6 gr. barium chloride *ter die*, and—℞. Hydrarg. iodidi viridis, extract. belladon., āā gr. 1-6. M. Ft pil. j. Sig.—*Ter die*.—*Coll. and Clin. Record*.

Ascending Neuritis.

In the case of a man at the clinic with ascending neuritis, Professor BARTHOLOW directed the application of the galvanic current and the internal use of iodide of sodium.—*Ibid*.

Headache and Its Relation to the Retention of Uric Acid.

THE etiology of many forms of headache is still quite obscure. Dr. A. HAIG maintains that one variety of periodic

headache is directly due to the retention of uric acid in the system. The usual sequence of events, according to him, is as follows :

There is a time (say seven to ten days) of good general health, active nutrition and bodily activity, with plus formation of uric acid and urea, and concomitant rise in acidity. As acidity rises, uric acid comes to be retained, and at the end of four or five days several grains may be regarded as stored up in the liver and spleen. Then come dyspepsia, gastro-intestinal catarrh and hepatic congestion (and Dr. Haig is not by any means certain that this hepatic congestion and gastro-intestinal trouble may not be the direct result of the accumulation of uric acid in the liver and spleen). These quickly result in general diminution of absorption and nutritive changes, with lessened formation of uric acid and urea and a fall in acidity; and lastly, as the result of this falling acidity, there comes a rush of the stored uric acid into the blood and the headache begins.

Such a sequence may be seen to some extent in the figure that accompanies his paper on headache (*Transactions*, 1887), for there the urea drops from five hundred and sixty-one grains to three hundred and sixty-three grains in the four days that immediately precede the headache. Although acidity was not estimated in this instance, there can be no doubt that it followed and shared in the fall of urea to a large extent. Such a sequence explains the periodicity of this kind of headache, and the way in which it comes to occur every week or ten days for many years, varying only in degree with the corresponding variations in nutrition. It is also evident that any causes which affect digestion will influence the attack in one of the above ways; while all causes of debility,

by weakening the nerve centre on which the uric acid acts, will render it more sensitive (the reverse of the action of bromides) and the attacks more frequent. A knowledge of these facts gives him almost complete power either to cause or cure this headache in himself and other sufferers.

The good effects of salicylic acid, and the salicylates generally, in this variety of headache, are due to the circumstance that they facilitate the excretion of uric acid, and thus prevent the retention of excessive amounts within the body.—*Medical Record*.

DIGESTIVE TRACT.

Pancreatic Digestion and Self-Intoxication.

DR. MALY (*British Medical Journal*) insists very strongly on the importance of pancreatic digestion as the main agency for the production of animal alkaloids. Among the toxic substances developed, the most important are guanin, xanthin, kreatinin, indol, skatol, and the ptomaines; the latter are the most toxic, and they may produce a variety of symptoms, and in Maly's opinion may in time, by their continual presence, bring about death. Brieger demonstrated to the German Surgical Congress three ptomaines, cadaverin, neurin, and mytilotoxin, which are among the products of putrefaction; they all produced convulsions, followed by paralysis and diarrhea, and other gastro-intestinal disturbances. It is argued that as pancreatic digestion is accompanied by putrefaction, these or other allied ptomaines are probably produced during its course. Putrefaction, however, can only occur when pancreatic digestion is unduly prolonged, unless by "pancreatic digestion" is to be understood the whole process of digestion in the intestines.

In this connection it may be observed that Brown-Séquard has recently ascertained that expired air contains toxic principles which are not destroyed by a temperature of 100° C. The experiments were made with the fluid obtained by condensation ; this was injected into the vascular system (artery or vein), or hypodermically ; death was very rapidly produced, probably through an action on the medulla. It may be added that the late Professor de Chaumont, of Netley, proved that the peculiar odorous principles familiarly recognized in the air of crowded rooms stood in direct ratio with the amount of carbonic acid in excess of the normal.

Splenic Murmurs.

IN a paper read before the Clinical Society of Paris (*La France Médicale*), Professor BOUCHARD drew attention to the existence of a bruit over the region of the spleen in cases of enlargement of this organ—a bruit not attributable to pressure upon vessels or to conduction from the heart, but apparently generated in the splenic artery or in the spleen itself. During the past three years he has constantly practised auscultation of the spleen, and on five occasions has detected such a bruit.

Three times the splenic enlargement was due to cirrhosis of the liver ; in one case the spleen was hypertrophied, as in leukæmia, but the blood was not altered ; and in the other the swollen spleen was associated with a large liver in an obese subject. In several cases—notably in malarial spleen and in one marked case of leukæmia—no bruit was to be detected.

He entered into details of his first case—one of cirrhosis of the liver,—in which the spleen was very large, measuring 17 by 11 centimetres (about 6.3 by 3.9 inches) and was hard and smooth.

Over its whole area there was audible a soft prolonged bruit synchronous with the pulse, but the bruit could not be traced beyond the splenic region. It was still audible when the patient was made to lie on the left side, to prevent the organ exercising any pressure upon the abdominal vessels. The bruit was audible whenever the patient was examined during the three years the patient was under observation.

The case was otherwise interesting as an example of "cured cirrhosis," upon which the chief discussion took place. There had been considerable ascites, which required paracentesis on three occasions ; but Professor Bouchard attributed the arrest of the disease to the prolonged administration of calomel in small doses. The patient also had an attack of uræmia, which was successfully treated by naphthol, on the theory of intestinal antiseptics being needed to limit the operation of auto-intoxication in the production of the uræmia.—*Lancet*.

Sulphur in Diseases of Alimentary Canal.

DR. ALFRED B. GARROD (*N. Y. Medical Abstract*) :

I have been accustomed for several years to administer sulphur in very small doses, and for a lengthened period of time, in the treatment of disorders of the alimentary canal and liver ; also in certain diseases of the joints, especially rheumatoid arthritis (one of the articular affections called by the erroneous name of rheumatic gout) ; and, lastly, in chronic muscular rheumatism and skin diseases ; and I purpose giving a treatment employed.

[On account of the difficulty of persuading patients to take sulphur regularly for a long time the author has used a lozenge containing five grains of milk of sulphur with one grain of cream of

tartar. These he has been in the habit of giving for the last five years.]

I have found that in many cases one lozenge each night is quite sufficient; if required, however, two may at one time be taken at bedtime, or one each night and morning.

Physiological Effects.—On the alimentary canal sulphur acts as a stimulant to the normal peristaltic movements, and in moderate doses becomes a laxative. It is probable that the stomach itself is little influenced by the sulphur, as the surface and contents of that organ are usually acid in reaction, and possess no solvent power; but when it arrives at the duodenum, and meets with a different condition of the mucous membrane and the presence of bile and pancreatic fluid, both alkaline in reaction, more or less of it becomes converted into a soluble sulphide, which is absorbed by the portal vessels, and passed first through the liver and afterwards into the general circulation by the hepatic vein. From the blood it afterwards becomes eliminated partly by the skin and partly by various mucous membranes. The presence of the cream of tartar helps to prevent the formation of any soluble sulphide in the stomach, and hence the absence of sulphurous eructations. Any soluble sulphur, however, which reaches the cæcum and colon, where the reaction is again acid, is apt to evolve hydrogen sulphide, and impart odor to the contents of the lower bowel.

When commencing the use of the small doses of sulphur, I scarcely anticipated that any appreciable laxative effect would be produced; in this, however, I was mistaken, and although the word purgative is too strong to be applied to the action of a single lozenge taken at bedtime, still, in the majority of cases, it is sufficient to prevent the use of ordi-

nary aperients; in several instances I have known distinct purgative effects produced by one lozenge.

That the secretion from the liver is increased in cases of sluggish action of that organ is often very noticeable in the altered character of the fæces; many patients have informed me that under the influence of the drug their motions have been brought from a pale clay color to the normal state; and although the action of the sulphur is slow compared with that of mercury, still in chronic torpid conditions of the liver, the advantage of the sulphur over the mercurial treatment is undoubted. In hæmorrhoidal conditions not suitable for surgical interference, and in some cases of bleeding from the rectum, I have seen the most marked beneficial effects from the continuous sulphur treatment; the bleeding is often completely stopped, and great relief of all the symptoms obtained, especially the accompanying pruritus.

A horse-artillery officer returned from India suffering from hæmorrhoids to an extent which almost incapacitated him from performing his military duties; he took a lozenge each night for four months and recovered so completely as to feel equal to return to India and resume active duties.

A middle-aged lady for many years suffered from attacks which were called hepatic colic, and in the intervals of the severe attacks she had constant trouble, evidently connected with the imperfect action of the liver. She had been to Carlsbad and Vichy several times, usually with more or less advantage, but with no approach to a cure. After treating her for the discomfort she was at the time suffering from, I ordered the sulphur lozenge to be taken each night for many months. I saw no more of her for ten months, and then found that

she had persevered with the treatment and had wonderfully improved; the attack of colic had gradually lessened both in frequency and severity, and were practically removed; and her last visit was more for the purposes of inquiring if she might still continue the use of the lozenge than from need of further treatment.

Habitual Constipation.

℞. Aloin., ext. nucis vom., ferri sulph., pulv. ipecac, pulv. myrrhæ, saponis, āā gr. ½. M. Ft. pil. Sig.—One pill to be taken half an hour before last meal of the day.—SIR A. CLARK.

Or, ℞. Ext. cascariæ s. liq., f ʒ ij; tr. nucis vom., f ʒ ij; glycerin, f ʒ j; aquam, ad f ʒ iv. M. Ft. mist. Sig.—ʒ j, as required.

Substitute for Carlsbad Salt.

℞. Sodii sulph., ʒ j; sodii chloridi, sodii bicarb. āā ʒ ss. M. Ft. pulv. Sig.—Take in half a tumblerful of tepid water.—*Coll. and Clin. Record.*

Colic.

A MIXTURE for colic, suggested in *St. Louis Journal of Medicine*, is the following: ℞. tinct. opii, tinct. rhei, spirit. menthæ piperit, spirit. camphoræ, spirit. chloroformi, tinct. capsici, āā ʒ v; tinct. catechu comp., q. s. ad f ʒ j. M. Sig.—A single dose.

Modern Treatment of Acute Intestinal Obstruction.

AT the meeting of the Cambridge Medical Society, Mr. MARMADUKE SHEILD, F.R.C.S., read a paper on this subject.

After referring to the perils of purgative treatment, he passed on to consider modern methods, and said we still find that even with all our increased knowledge and improvements a large propor-

tion of cases of acute intestinal obstructions perish. Diagnosis is ever uncertain. It may be said that probably an internal hernia exists, or that probably a gall-stone is impacted and so on; but when the abdomen is opened, an unsuspected invagination is found. The fact remains that, with the exception of certain cases of invagination, no living man can with certainty diagnose the condition that really exists. The importance of searching for external hernia cannot be exaggerated. In the upper classes, in those who are obese, and in females, this precaution is especially needful. Even after examination a small rupture may not be recognized. To ascertain the presence or absence of mechanical obstruction, the medical attendant should bear in mind that there are three pathological conditions which closely simulate intestinal obstruction. The first of these is acute peritonitis, perforative or otherwise; the second, acute enteritis set up by irritating ingesta; the third, rotation of an ovarian tumor on its pedicle. The third and last condition urgently calls for abdominal section, and need not be further considered. Without dwelling upon the special symptoms of these cases, he remarked that in no one of them is there true obstruction. Fæcal matter and gas will pass if properly solicited by the aid of enemata. Copious enemata, then, are the first aids to diagnosis and treatment. In cases of acute obstruction the patient is in danger of dying from starvation. Nutrient enemata can be absorbed from the colon, and should always be employed. Meanwhile, opium should be given by the mouth, and is most useful when pain, and especially shock, are marked symptoms. The fallacious improvement in the case, which always occurs under opium, will not lull the anxieties of the

judicious practitioner, who knows that fatal strangulation is still persisting. Now if the symptoms of acute obstruction should be marked, and enemata, properly given, fail to do more than evacuate the contents of the colon, it may be concluded for certain that obstruction exists. Manipulation of the abdomen, with inversion of the patient and galvanism of the abdominal walls, may be tried. The sudden inversion of a patient on a sofa or hard bed, causing the intestines to roll towards the diaphragm, may pull out a coil of bowel from under a hand, or out of an unsuspected hernia. All these measures, however, must be done by the doctor himself early in the case, thoroughly and once for all. Now, supposing all this has been practised and the symptoms still persist, and abdominal section properly conducted gives the patient a chance of recovery.—*Lancet*.

Spiced Plaster.

THE spiced plaster, an efficient local counter-irritant in many forms of gastro-intestinal catarrh, is rendered less liable to become hardened and brittle by the addition of a tenth part of powdered gum arabic, says *Arch. of Pædiatrics*.

Clinical Significance of Colorless Stools.

AT a recent meeting of the Royal Medical and Chirurgical Society, a paper by Dr. T. J. WALKER was read by Dr. Andrew Clark as to the "Clinical Significance of Colorless or Clay colored Stools unaccompanied by Jaundice, their Connection with Disease of the Pancreas and on the part played by the Pancreas in eliminating Bile from the Intestines." (*Lancet*.) After referring to the accepted views of the significance of clay colored stools, the author gave particulars of two cases in which during life a persistent symptom was the absence

of color in the fæces, and in which the diagnosis made of obstruction of the pancreatic duct, with a healthy condition of the bile duct, was confirmed by the necropsy. From these cases he concluded,

1. That the formation of hydrobilirubin, the coloring matter of the fæces, depended on the mutual reaction of the bile and pancreatic fluid, under the influences met with in the intestinal tract.

2. That in disease a deficiency of pancreatic fluid would, equally with a deficiency of bile, cause the pathological condition of colorless or clay colored stools.

3. That, since, according to the most recent physiological researches, that portion only of the colored constituents of the bile which had been converted into hydrobilirubin was excreted in the fæces, while the unchanged bilirubin, bilifuscin, and biliverdin were absorbed, it followed that if hydrobilirubin, could not be produced without the aid of the pancreas, that organ must have an important rôle in regulating what proportion of the bile entering the intestines should be absorbed and what thrown off in the fæces.

Dr. Walker then pointed out that these conclusions received confirmation from the records of other published cases, that Claude Bernard recognized that the pancreas had a part in causing the color of the fæces, and that the state in which the bile pigments were found in the meconium of the fetus, while the pancreatic function was in abeyance, also accorded with these conclusions.

He further pointed out that the fact of the pancreas influencing the excretion of the bile in the fæces would, if accepted, reconcile the discrepancy between the clinical observation that certain drugs produced copious bilious

stools, and the physiological observation that these drugs had little or no influence on the secretion of bile by the liver; and that the same fact would explain those hitherto inexplicable cases in which, with no evidence of arrest of the bile-secreting functions of the liver or of obstruction of its ducts, the symptom of white or clay colored stools was persistently present.

In conclusion, Dr. Walker indicated the practical importance of the views he had endeavored to establish in the treatment and diagnosis of pancreatic disease and of all forms of bilious disorder.—*Therapeutic Gazette*.

A Case of Acute Yellow Atrophy of the Liver.

DR. JENKINS (*Journal American Medical Association*):

A shoemaker, æt. 42, had been complaining of pain in the region of the liver and stomach for upwards of two weeks previous to calling a physician. The man was of temperate habits, and was not given to excess of any kind. Dr. GEO. HOWELL, who attended him during the last week of his illness, gave the following history of the case:

Upon examination, the patient's pulse ranged between 50 and 60 until within a few hours of his death, when it exceeded 100 per minute. The skin was jaundiced. The temperature never exceeded 100° F., and within a few hours of his death it was natural. There was slight nausea, but during the last week of his illness the patient neither complained of pain in the region of the liver or stomach. The area of dulness over the liver rapidly decreased, so that its lower border could not be detected upon the most careful examination when the writer was called in consultation, about seven hours before death.

At no time did he complain of head-

ache, or pain in any portion of the head. There was a tendency to stupor during the last week of his sickness, but up to twenty-four hours of his death (which took place March 10, 1889,) he could easily be aroused, and would answer questions rationally. During the course of the night previous to his death the patient vomited up a pint or more of dark grumous blood, looking very much like that which is described as the black vomit of the yellow fever. The stupor then became more profound, the pupils of the eyes were largely dilated, there being marked oscillation of the eyeballs from within outwards, and taking place within a certain degree of regularity, averaging about ten times per minute, to within a short period of his death.

A *post-mortem* examination was made by Dr. Howell, in the presence of several physicians, about twenty hours after death. An incision was made, exposing to view the stomach, bowels, and liver, showing that the latter organ was from one-third to one-half its normal size. Its upper surface was pale in color, studded here and there with patches having the appearance of rhubarb in color. The fluid in the organ was darker and thicker than natural. No microscopical examination was made. The stomach and spleen apparently were in a healthy condition. The kidneys were slightly enlarged. A short distance from the entrance of the gall duct into the duodenum was found an old ulcer partially healed, and which appeared to have no significance relative to the disease of the liver.

Treatment of Typhlitic Diseases.

DR. A. M. JACOBUS, of New York, in an interesting study of these affections (*Medical Record*), concludes:

1. That typhlitic diseases are intraperitoneal, that in nearly every instance

they originate in inflammation or perforation of the appendix or cæcum, usually caused by fæcal impaction or foreign bodies, that even though these diseases frequently do not primarily end in suppuration, still their tendency is to recur and eventually end fatally by septicæmia, or shock from ruptured abscess, or purulent peritonitis.

2. That, in view of the foregoing, all diseases of this region, giving symptoms of inflammation or peritonitis, without regard to the question of pus or abscess and which do not yield promptly to the modern medicinal treatment, and are progressive, should be treated by laparotomy at the earliest period possible.

3. That when peritoneal or intestinal adhesions or pus sacs exists, they should always be broken up, the abdominal cavity thoroughly douched with sterilized plain water, at a temperature of 105° F., the wounds sutured, and the cavity drained by glass tubes.

4. That excepting in undoubted cases of simple post-cæcal abscess unaccompanied by peritonitis, the incision should be made either vertically over the caput coli (after Sands), or in the linea alba, below the umbilicus, and preferably the latter operation when extensive peritonitis or adhesions are suspected.

5. That whether in operative cases or not, opiates should be used as little as possible; but on the other hand, saline or vegetable cathartics (followed by enemata) should be used from time to time, to relieve the inflammation, tympanites pain and fever, and particularly to drain the peritoneal cavity of serous or purulent effusion.

DISEASES OF RESPIRATORY ORGANS.

Compressed Air in Pleurisy.

IN the *Warsaw Ooiazdovsky Military Hospital Reports*, 1888, Dr. TOPORKOFF

has published an able paper on the treatment of exudative pleurisy by compressed air, which method has been practiced by him in fourteen successive cases of the disease, on soldiers, aged from 22 to 26. The air was condensed by means of Waldenburg's apparatus.

Following Professor Oertel's rules, Dr. Toporkoff commenced the treatment with the air compressed at 1-60 atmosphere, to pass on the next week to that at 1-40, and on the third to that at 1-30, the sittings being repeated two or three times daily, and lasting each time for 20 to 30 minutes.

The treatment was invariably resorted to only after all febrile symptoms and phenomena of irritation of the inflamed pleura had disappeared, and after all other means, such as revulsives and promoting absorption, had failed.

The results obtained from compressed air were verified by systematic measurements of the pulmonary capacity (by means of Hutchinson's apparatus), and of the respiratory force (by means of a pneumatometer). Of the fourteen cases, in seven a complete and permanent cure followed, the duration of the treatment being in 3 cases, 17 days; in 1, 20; in 2, 21; and 1, 2½ months (which gives the average = 27 days). Of the remaining seven cases, in two only partial improvement could be obtained, while in five the patient's state remained wholly unrelieved. All the seven men were dismissed from military service.

On the whole, Dr. Toporkoff arrives at the conclusion that the compressed air treatment proves to be successful only in cases of more or less strong and well nourished persons, with a relatively recent disease (of a few weeks' standing), while anæmic and weak subjects with symptoms of many months' standing obtain no benefits from compressed air.—*St. Louis Med. and Surg. Journal*.

Immediate Relief of Hoarseness.

THE first Napoleon is said to have been subject to sudden attacks of severe hoarseness, for the immediate relief of which his physician was in the habit of prescribing the following, known as Foreau's syrup: \mathcal{R} . Liquor ammoniæ fortioris, m x; syrupi erysimi, \mathfrak{z} iss; infusionis tiliaæ florum, \mathfrak{z} iiss. M. To be taken at one dose.

Erysemum officinale (*sisymbrium offic.*) or hedge mustard is no longer official, but is easily obtained. It is a small annual growing almost everywhere in the United States and Canada, as well as in Europe. The infusion of linden (tilia) is used simply as an agreeable vehicle, and may be dispensed with or supplanted by any other.

Hydrastis Canadensis.

IN a recent number of the *Lancet*, Dr. FELSENBURG, of Vienna, is said to recommend highly the local use of the fluid extract of *Hydrastis canadensis* in chronic pharyngitis, whether accompanied with enlargement of the tonsils or not, and also to suggest that similar treatment might prove successful in chronic inflammatory affections of other mucous membranes.—*N. Y. Medical Journal*.

Pleurisy.

THE *Medical World* gives the following prescriptions:

\mathcal{R} . Antimonii tartarati, gr. j; vin. ipecacuanha, dr. j; aq. dest., oz. viij. One teaspoonful every hour. In acute pleurisy.

\mathcal{R} . Potass. iodidi., gr. xxxij; syr. ferri iodidi., oz. j; glycerini, oz. j. One teaspoonful twice a day. In children's pleurisy.

\mathcal{R} . Potass. nitratis, dr. ij; liq. ammo. acetatis, oz. ij, dr. ij; sp. ammon. arom., dr. ij; tinct. aconiti, dr. ss; aq. dest. ad., oz. viij. 2 tablespoonfuls every 5 hours.

\mathcal{R} . Ammo. carb., dr. ss; sp. chloroformi, dr. iij; vin. colchici, dr. ss; liq. ammon. citratis, oz. iiss; mucil. acaciæ, oz. vi; aq. dest. ad., oz. viij. Two tablespoonfuls every four hours.

\mathcal{R} . Pil. hydrarg., gr. ij; fol. digitalis, gr. $\frac{1}{2}$; pulv. scillæ, gr. iss. Make one pill, to be taken twice or thrice daily.

Hot Baths in Croupous Pneumonia.

AT the third general meeting of Russian physicians at St. Petersburg, Dr. Alexandr A. Netchaieff and Alexandr E. Iagodinsky, of St. Petersburg, read a paper on the treatment of croupous pneumonia by hot water baths, based on 87 cases. Of the number, 70 recovered, and 17 (19.7 per cent.) died. The main general conclusions may be given as follows:

1. Hot baths, given once or twice daily, manifest a very favorable influence on the patient's subjective state.

2. Old people (of 50 and upwards) and such subjects in whom pneumonia is complicated with acute or chronic nephritis, tolerate better the baths at from 30° to 32° Reaumur; younger persons free from renal complications, those at 28° or 29°.

3. Generally the baths prove of great service in all cases of croupous pneumonia.

4. But they are especially beneficial in old people, and that in regard both to the course and issue of the disease. (The mortality among the author's old pneumonic patients, treated by hot baths, amounted only to 19.4 per cent. Meanwhile, the average mortality from pneumonia in subjects above 50, oscillates between 35 and 50 per cent.)—*St. Louis Med. and Surg. Reporter*.

Paroxysmal Cough.

A MIXTURE for troublesome cough of a violent paroxysmal nature, often

met with after influenza, is given by Dr. H. O'B. DECK in *Therapeutic Gazette*: ℞. Cocain. hydrochlorat., gr. ij; morphinæ sulph., gr. iss; extract. glycyrrhiz. liquid.; glycerini, āā m xx; aquæ, q. s. ad f ̄ iv. M. Sig.—One dessertspoonful every two hours, till the cough is relieved: then less frequently. To be swallowed slowly.

Camphoric Acid in Catarrhs of Mucous Membranes.

DR. MAX NEISEL states in the *Deutsche Med. Wochenschrift*, that he has employed, in Mosler's clinic, camphoric acid in one-half to one per cent. glycerine or alkaline solution in the form of gargles, applications made with a brush, or inhalations, and has obtained good results in slight catarrhs of the larynx, throat, and bronchi. The action of washings of a twenty per cent. alcoholic solution diluted with lukewarm water to one-half or one per cent., was especially favorable in two cases of chronic cystitis.

Given internally, camphoric acid seems to be of advantage in the night sweats of phthisis. It may be given in capsules containing fifteen or twenty grains.—*Schmidt's Jahrbücher*.

DISEASES OF THE URINARY ORGANS.

Intermittent and Latent Albuminuria.

DR. GEO. JOHNSON (*British Medical Journal*) attempts to establish the following points:

1. The presence of albumen in the urine, though small in amount and occasionally intermittent, is always pathological.

2. The practice of testing the urine in all cases of ailments, even the most trivial—the importance of which I have for so many years insisted upon—has led to the detection of albuminuria in

many youths and adolescents who are especially liable to be exposed to the commonest of its exciting causes, namely, cold and wet and over-fatigue, and who have not lived long enough for the ultimate evil results of a neglected albuminuria to have become developed.

3. The albuminuria, whether intermittent or persistent, of persons apparently in good health, has no such special features as to require it to be designated by such misleading terms as "physiological," "functional," "cyclical," and "the albuminuria of adolescence." The last term is especially inappropriate, since the condition is of common occurrence in both sexes and at all periods of life from childhood to extreme old age.

4. In almost every instance these cases of albuminuria may, by careful inquiry, be traced back to some recognized exciting cause.

5. Nearly all cases of acute nephritis pass through the stage of intermittent albuminuria in their progress towards convalescence, and, on the other hand, the majority of cases of intermittent albuminuria may be traced back to a more or less remote attack of acute nephritis.

6. While on the one hand, intermittent albuminuria—even though it may have existed for years—may be looked upon as a curable condition, if only its exciting cause can be ascertained, avoided, and counteracted by suitable dietetic, medicinal, and hygienic means; on the other hand, the neglect of such means may convert an intermittent into a persistent albuminuria; and a persistent albuminuria, although for many years it may be unattended by symptoms of disordered health, ultimately results in a fatal degeneration of the kidneys.

7. Since it is notorious that albumen, even to a very large amount, may exist

in the urine of persons who are apparently in perfect health, it is obvious that the urine of every patient no matter how apparently trivial his ailment, and the urine of every applicant for life assurance, no matter how robust his appearance, should be tested for albumen.

8. For many years past the fact that albumen may be abundantly present at one period of the twenty-four hours and entirely absent at another, has been publicly demonstrated, and ought to be generally known. It is, therefore, necessary to test the urine, not only after rest in bed and before breakfast, but also after food and exercise.

With regard to the question of albuminuria in life assurance, no prudent medical office would advise that a proposed assurer with a trace of albumen in the urine should be accepted at the ordinary rate of premium. Such a condition, even in a careful and prudent man must involve some extra risk, and no office can insure care and prudence.

Whether an albuminuric should be accepted on any terms can be determined only by a careful inquiry into the particulars of each case. It goes without saying, that such unquestionable signs of advanced organic disease as albuminuric retinitis and cardiac hypertrophy, would exclude the applicant; but Dr. Tyson, of Philadelphia, with whom the writer "X" agrees, would not consider that an amount of albumen not exceeding one-fifth of the bulk of urine examined, and unaccompanied by tube-casts, "formal ground for exclusion." As to this, I venture to remark that while small hyaline and epithelial casts are often present in the albuminous urine of patients whose speedy recovery may be confidently predicted, on the other hand, in the advanced stages of a contracted granular kidney

(the so-called cirrhotic kidney), the amount of coagulated albumen is often less than one-fifth of the volume of urine examined, and the characteristic large hyaline and granular casts may be absent for days, and even for many weeks, consecutively.

Treatment of Certain Cases of Chronic Uræmia by Morphine.

DR. MACKENZIE (*British Medical Journal*):

A woman, aged thirty-eight, had suffered from chronic diffuse nephritis of some years' standing.

There were anasarca, ascites and breathlessness. The urine contained from one-half to two-thirds of albumen. The heart was hypertrophied and there was double papillo-retinitis. She was treated for the renal symptoms with great benefit, and in about six weeks was free from dropsy and breathlessness and was able to leave her bed.

One evening, after unusual exertion in the afternoon, she was suddenly attacked by intense dyspnœa, with respirations fifty in the minute. The heart's action was weak, 150 to 200 per minute; she was cyanosed, and covered from head to foot with clammy sweat. She was in a condition of mental excitement, with great terror of dying. She was treated with nitrite of amyl, alcohol, ammonia and ether, without any relief, and then one-sixth of a grain of morphine hydrochlorate was injected hypodermically. In a few minutes the dyspnœa became less urgent; in twenty minutes the patient was able to lie down and on the following morning was in her usual condition.

Several subsequent attacks were treated in a similar manner after the failure of other remedies. Morphine hypodermically and internally never failed to afford relief, and at no time were toxic

effects induced. The patient died three months and a half after the first attack of dyspnœa of symptoms of chronic Bright's disease.

Case 2 was a woman, aged twenty-eight, suffering from granular kidneys of four years' standing. There was considerable anasarca, about one-third albumen in the urine, hypertrophy of the left ventricle, with mitral incompetency and double papillo-retinitis. She suffered much from breathlessness and headache. After decided improvement for a time, she suffered from severe headache, nausea, breathlessness, and irregular action of the heart, and great sleeplessness. Chloral, bromides, nitroglycerine and inhalations of oil of juniper were used without effect, or with little effect. Liq. morphine hydrochlor., π x, was then administered with rapid alleviation of all the symptoms. It was repeated on many subsequent occasions with equal benefit, and with no drawbacks. The patient died of the combined effects of a carbuncle and the renal disease about two months after the treatment was employed. Ten minim doses of the solution of morphine always promptly relieved distressing symptoms; five minim doses were not sufficient.—*British Medical Journal*.

Antipyrin in the Treatment of Diabetes.

A. ROBIN sums up the advantages of antipyrin in diabetes, according to his experience, as follows :

1. It may be employed from the outset in the treatment of diabetes where a glycosuria or acute polyuria is to be reduced without delay.

2. It allows of a suspension of the diet in patients who dislike the latter, without their losing the benefit of the previous restriction.

3. It is indicated when the diet, long continued and well tolerated, has pro-

duced its greatest effect in reducing the glycosuria and polyuria.

4. A wise combination of diet and antipyrin, associated in a sort of alternating manner, appears to be the best treatment for diabetes.

5. It is not necessary to continue the use of the drug if it does not produce an immediate and considerable diminution of the glycosuria.

6. One of the best ways of judging the effects of antipyrin is not only to ascertain every day the quantity of sugar in the urine, but also to measure daily the quantity of urine and its density. The action of antipyrin is favorable in the proportion in which the quantity diminishes and the density is reduced, or at least the latter should remain stationary. But if, with the quantity of urine diminishing, its density tends to increase, the use of antipyrin should be stopped immediately and permanently.

7. Albuminuria does not constitute an absolute contraindication. Its presence simply involves a question of its dose and of the duration of its use.

8. Finally, loss of appetite, emaciation, a sensation of weakness, pallor, oppression, swelling of the eyelids, or a sensation of tension in the face, are symptoms demonstrating, where they appear, that the use of the antipyrin is more harmful than useful, even if the glycosuria should be influenced favorably.—*La Semaine Médicale*.—*Journal American Medical Association*.

Treatment of Hæmaturia.

PROFESSOR ULTMANN, according to the *Deutsche Med. Wochenschrift*, suggests the following formula for use in hæmaturia :

℞. Ext. ergotæ, gr. xv ; sacchari albi, gr. xxx. M. Div. in pulv. No. vi. Sig. One powder every 3 hours.

THE AMERICAN MEDICAL DIGEST.

PART II.

SURGERY.

FRACTURES, DISLOCATIONS, INJURIES, TUMORS, &c.

Fracture of the Patella.

CLINICAL lecture by Dr. HAYES AGNEW :

We have here another patient, one who has a fracture of the patella.

A few days ago, while trying to board a moving train, he was thrown violently against an upright signal pole, and has sustained a transverse fracture of the patella, which is a rare occurrence. Fractures of the patella may be caused by direct violence, and by muscular action, and when it is caused by direct violence, it is almost always in an oblique, vertical or stellate fracture. When it is fractured in a transverse direction, it is almost always done by muscular action, as when a person is about to fall, or be thrown down, in his violent effort to prevent his falling, and when his knee is in a semiflexed position, his patella is fractured in a transverse direction by the violent contractions of the strong muscles of his thigh opposed by the ligamentum patella below, much the same as you would break a stick by pulling it over your knee with a hand on either end. But in this case you see a transverse fracture caused by direct violence. This is merely an exception to the rule. This is also a complete fracture, the parts being separated from $1\frac{1}{2}$ to 2 inches, and as you see the limb is very much swollen or puffed up by the accumulation of fluid in the joint. Now, it is very desirable that this fluid should be disposed of before we try to bring the parts together, and in order to do this some surgeons recommend the aspirator. In this case, however, we will try milder means.

First, we will place a bladder filled with broken ice about the joint, and follow this with a couple of large blis-

ters, and if this does not effect the desired result, the aspirator will then be used. Now, there are two ways of bringing the fractured ends of the patella together; first by plasters, one strip being passed around below the lower part, and strongly drawn upward and made to adhere to the skin of the thigh above the knee; another strip is passed around the upper fragment and strongly drawn down, and made to adhere below the knee. The limb must lay on its posterior aspect, and perfectly relaxed, and then, by manipulations and flexing the thigh upon the pelvis and extending the leg, the fractured ends may be brought very nearly into approximation; always remembering, however, that the upper part must be drawn down, and that the lower part cannot be drawn up, as the ligamentum patella is not elastic.

The other way of reducing this fracture is to cut down on to the bone, freshen the two fractured surfaces, pass strong wires through each, draw them together, twist the wires, and so retain them in apposition until union takes place. This latter process is attended by so much danger that it is not often resorted to. Patients have lost their lives as a result of it, and many have suffered amputation.

In either of these operations we can hardly hope for bony union; some surgeons claim to get bony union in favorable cases, but it has been claimed by just as good authority that bony union never takes place in these cases. The fibrous union which we do get, however, is as good for all practical purposes as bony union would be, while some claim that it is better than bony union would be, if we did get it, as the patella will never break again at the same place after fibrous union has taken place.—*Journal American Med. Asso.*

A Plantar Spring for the Relief of Flat-Foot.

ONE of the prominent symptoms accompanying flat-foot is the almost constant pain which is present. Dr. A. SYDNEY ROBERTS, after giving a very good résumé of the varieties and etiology of this affection (*Medical and Surgical Reporter*), speaks of a cheap and effective arch support which he uses. A glance at figures 51 and 52 will show the construction of this spring. It is

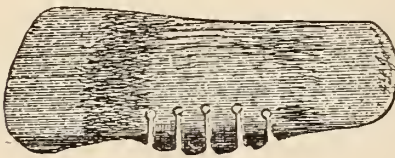


Fig. 51.

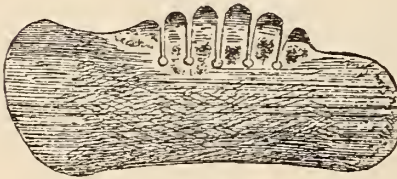


Fig. 52.

made of tempered steel and is simply inserted in the shoe. Of course each one is made to fit the patient's foot, the elevated portion of the spring, corresponding to the depressed arch of the foot, being tempered to the extent required by the particular case. The lateral pressure brought to bear by the elevated flanges is such, that, while giving support to the arch to a certain extent, the artificial arch also prevents further displacement of the astragalus and scaphoid.—*St. Louis Medical and Surgical Journal*.

Drilling of Capillary Holes Through the Skull for the Purpose of Exploring with the Hypodermic Needle.

DR. E. SOUCHON (*New Orleans Medical and Surgical Journal*):

Fully impressed with the importance of early diagnoses in cases of brain

trouble, it occurred to me that it would be possible to substitute for the apparently formidable application of the trepan, the simpler, readier, less formidable, and less dangerous procedure of drilling through the skull a small hole, only large enough to introduce a hypodermic needle.

With this idea in view I proceeded to test the idea practically on dogs. All the rules of strict antisepsis and of location of the spots for operation which have to be observed for trephining were followed here and strictly adhered to. The animals were placed under chloroform specially with the view of controlling them and keeping them perfectly quiet.

The spot to be explored was shaved of its hair by a clip of the point of the scissors, and the place well washed and rendered antiseptic. Then with a sharp pointed aseptic bistoury a hole was made through the soft parts of the scalp. Through this the bit of a watchmaker's drill was introduced, and as soon as it had reached the bone the instrument was held firmly pressed against the bone, and the sliding knot of the instrument worked, at first slowly, then swiftly, and again slowly, as the bit penetrated the bone and came near the brain substance. The bit is provided with a movable screw, which is adjusted so as to prevent the bit from penetrating too deeply into the brain tissue.

As soon as the skull has been penetrated the drill is withdrawn and a hypodermic needle with syringe introduced. The needle should be twice as large as the ordinary needle of our cases, so that if it should strike the thick pus of an abscess, or the thick fluid of a cyst, the calibre will be large enough to suck it, which it will surely not do if the needle is as fine as the one ordinarily used for a hypodermic injection.

This procedure was performed twice on each side of the middle line of the skull on two dogs. Each time the needle was driven to the hilt within the tissues, the distance from the point to the hilt being about an inch and a half.

Both recovered rapidly from the effects of the chloroform, and behaved as naturally afterwards as if their skull and brain had not been perforated four times at different places.

After a rest of two weeks the animals were again put under chloroform, and again the skull and brain were drilled and explored in four places.

The result was exactly the same as at the first sitting. They recovered rapidly. The dogs were kept about the yard for several weeks to see if any remote effects would develop, but none were noticed.

After the dogs had been driven away, they returned several times, and never showed any thing unusual.

During an experiment one dog was killed before recovering from the chloroform, to see what damage if any, had been produced. Besides an extravasation of blood of the size of a nickel under the scalp, and one the size of a pea under the pia-mater, nothing else could be seen of the traumatism inflicted.

The greatest advantage of the method is the simplicity of the operation and on that account the possibility of exploring several points of the brain at the same sitting, instead of being limited to a given area, as in the case of the trephine.

The needle, upon striking a tumor of greater consistency than the brain substance, would immediately impart the sensation, localization, and consistency to the hand of the explorer. If no such sensation is experienced, then the piston should be worked at different depths to see if there is no fluid tumor at the points explored.

Only in cases of tumors of the same consistency as the brain substance would the procedure be useless and yield no information, positive or negative.

I do not think, in the presence of the great progress of brain surgery, that it is a chimerical idea to say that some day the skull will be drilled in cases of cerebral hemorrhage, and the blood aspirated here as it is in other situations.

What is the Best Method of Dealing with Constricted Intestine in a Hernial Sac ?

DR. A. J. MCCOSH read a paper on this subject :

Dr. WEIR said that he could recall five cases of gangrenous hernia in which the opening closed spontaneously ; hence it seemed wiser to give the patient this chance. If marasmus developed during the continuance of the fæcal fistula, prompt resection should be performed. He was unable to state the condition of the patients subsequent to the healing of the intestinal opening. He had never seen any obstructive symptoms produced by this cicatrization.

Dr. Wyeth thought that it was important to ascertain the after history of these cases of hernia in which there was so-called "spontaneous cure," in order to determine whether or not they succumbed to marasmus or to the stricture. In reply to a question by the president, he said that he could recall no case of this kind in which the patient had subsequently found it necessary to apply to another surgeon. He had never seen a case of so-called spontaneous cure.

Dr. Lange said that he had seen two cases of spontaneous cure after necrosis of the gut. He had lost one patient from collapse after immediate resection, and did not feel inclined to repeat the operation, but preferred to relieve the constriction and to temporize. It was always difficult to decide what to do

with a gangrenous hernia. After dilating the ring and pulling out the gut, the latter might burst and thus cause infectious peritonitis. In such a case it might be better to let the gut alone. In one instance he overlooked a gangrenous spot on the imprisoned intestine and returned the latter to the abdominal cavity. Perforation occurred, and the patient died of septic peritonitis on the second or third day after the operation. When the presence of gangrene was suspected it might be wiser to simply divide the ring and to leave the gut *in situ*.

Dr. Weir said that in two cases of gangrene of the hernia, he had simply laid open the gangrenous bowel, and if the gut had burst spontaneously before he incised the sac; in one only had he found it necessary to relieve the strangulating parts.

Dr. Lange believed that in these cases it was sometimes necessary to do a sort of partial laparotomy.

Dr. Weir thought that nature generally relieved the constriction when gangrene occurred.

Dr. Wyeth cited a case in which, although perforation occurred, there was no escape of the contents of the gut. With regard to the length of the operation, in Dr. McCosh's case it was certainly not long. In his own case the speaker had taken a long time, but would only be half as long at another operation. He thought that it was safer to open the gangrenous intestine and allow the escape of its contents rather than to wait for spontaneous perforation. The amount of mesentery excised depended on the length of gut removed. He preferred silk sutures, as catgut did not stand the strain. Extra sutures should be introduced at the mesenteric attachment, as the gut was apt to give way at this point. If a fæcal fistula was established, enterorrhaphy

should be done as soon as possible—within from five to fourteen days—on account of shrinkage in the intestines below the seat of perforation.

Dr. Lange said that only a few patients could stand immediate resection. Most surgeons advocated temporizing. It all depended on the amount of intestine affected.

Dr. Weir referred to the case of a woman operated upon by Cottrell, of Edinburgh. She was advanced in pregnancy and had a strangulated umbilical hernia. Fourteen inches of the transverse colon was gangrenous, and an artificial anus was established. Subsequently resection and reunion of the two ends of the colon were resorted to, and the patient, when seen by Dr. Weir, was making a good recovery.

Dr. Gerster said that it was important to distinguish two classes of cases. If strangulation had caused necrosis, but fœtid disintegration—that is, the loss of cohesion of the dead tissues—was not complete, there was some propriety in resorting to measures requiring considerable manipulation of the parts, as it was to be expected that unexpected laceration or rupture of the dead gut and escape of its contents would not occur. But when the necrosed gut had undergone actual chemical and textural disintegration to such an extent as to render a lesion of its continuity very probable by the slightest interference, exsection would be a very risky measure, not only on account of the great danger of contact infection of the peritoneal cavity, but also on account of the wretched general condition of the patient from sepsis usually encountered at that stage of the malady. No prolonged operation under anæsthesia will be well borne under these circumstances by any patient.

Dr. Kammerer thought that it was

important to divide the ring. He cited two cases in which it had not been divided sufficiently, and the patients died with symptoms of shock. He had performed the secondary operation, but without success. In two cases of gangrenous hernia, healing occurred spontaneously after the formation of an artificial anus: there were no ill results. In one instance there was an irregular rent in the gut, which healed in the course of eight days.

Dr. Briddon cited three cases of strangulated hernia in which recovery occurred without incision of the ring. He had seen several cases in which the constriction was so tight that it was necessary to divide it even after the bowel was opened.

The Radical Cure of Inguinal Hernia.

DR. MCBURNEY (*Medical Record*):

The author concisely, clearly and completely describes the operation by the "open method," originally devised by Reisel, but independently worked out and adapted by himself, and which is as follows:

The most careful antiseptic precautions having been adopted, especially in reference to cleansing the skin of the pubic, scrotal and inguinal regions, a free incision is made, beginning a little outside the situation of the internal ring, and extending a sufficient distance downward over the sac. The incision is rapidly deepened over the whole length of the canal, so as to freely expose its anterior wall—that is, the aponeurosis of the external oblique muscle. The superficial layers over the sac are now cleared away so as to plainly show the whole anterior wall of the canal; the concave border of the external ring and its two pillars are completely exposed in their whole length.

The sac is still covered below the ex-

ternal ring by the external spermatic or intercolumnar fascia. This fascia is now opened, and one blade of a blunt scissors being pushed under the edge of the external ring, the anterior wall is split completely up to and a trifle beyond the outer border of the internal ring.

The deeper coverings of the sac are now dissected off, this dissection being often best and most rapidly accomplished with the fingers. If, now, the fascia transversalis is partially removed high up in the canal, it is quite easy to separate the spermatic cord from the sac, and this, too, often in congenital hernia. If begun below the external ring, this separation is often extremely difficult. The cord being now separated from a sac up to a point a little within the abdomen, the whole sac is dissected out and lifted up.

At this stage, especially, the whole wound is thoroughly cleansed and the hands of the operator and assistants washed. The sac is now invariably opened, and if intestinal contents are present these are reduced; if omentum is present it is very securely tied off with catgut, a large stump to prevent slipping of the ligature is left, and the rest cut away. The stump is pushed completely back into the cavity, adhesions being broken down or ligated if present.

The sac is now held up vertically from the internal ring, and the operator inserts one or two fingers through the neck and a little way into the peritoneal cavity. This is done to guard positively against the return of a piece of intestine or omentum into the sac during the application of the ligature. The first assistant then places the ligature of stout catgut or prepared silk about the neck at the very highest point—that is, on a level with the general peritoneum. The ligature is gently tightened on the oper-

ator's finger, and closed very tightly as the operator's finger is withdrawn. A pedicle, sufficient in size to prevent slipping of the ligature, is left, the rest of the sack being cut away. In congenital herniæ this step is a little more troublesome, as one must often resort to sewing the neck carefully and smoothly.

There now remains a long wound which includes the whole length of the canal, and even the entire circumference of the internal ring. The aim being to insure the formation of granulation from the very bottom of the wound to the surface, it is not sufficient to simply pack the wound. The packing could easily become displaced and the deeper layers rapidly but feebly unite. Moreover, it is desirable to bring down the stretched and lax edge of the conjoined tendon.

These stitches of stout silk or catgut are therefore placed as follows: From four to eight, according to the size of the wound, bind together the tissues which form the upper wall of the wound, that is, the conjoined tendon, the aponeurosis of the external oblique (including the inner pillar of the external ring), and the skin. The skin is carefully and deeply inverted while each stitch is tied tightly. As many more sutures bind together at the lower wall the skin and Poupart's ligament, including at the lower part the outer pillar of the external ring. This suturing positively secures patency of the wound, and the formation of granulations from the bottom.

As thus arranged the wound would be unnecessarily wide, and now two or more heavy tension sutures are carried across the wound. These also relieve the tension on the edge stitches so that these latter do not cut their way out too soon. The wound is now carefully irrigated and dusted with iodoform throughout.

Lastly, iodoform gauze is firmly packed through the entire length of the canal, particular care being necessary to see that in packing at the outer angle, the whole circumference of the internal ring, including the stump of the sac, is covered by the packing.

The scrotal or labial wound is sewed up simply without packing, a drain being inserted at the lower end if necessary. This dressing is now covered with abundant masses of bichloride gauze and cotton, and the whole very firmly bound in place with bandages. Healing takes place by granulation in five or six weeks, and a firm cicatrix is left.

The patients are allowed to wear a truss after this operation. There is certainly very much to commend in it. Dr. McBurney claims for it the following advantages: 1. That it is the only method in which the sac is completely obliterated. 2. That the walls of the canal are very firmly united, throughout its whole length, by strong cicatricial tissue. 3. That the wound being open, the risk of abscess and septic complications is reduced to a minimum. 4. That it is rapid, and applicable to every form of inguinal hernia.

The Disinfection of Surgical Instruments.

DR. L. FREEMAN, in a paper recently read before the Cincinnati Academy of Medicine (*Cinn. Lancet-Critic*), states that upon the thorough disinfection of our fingers depends so much that every physician should be familiar with the very best process for accomplishing this end. Fürbinger has furnished us with perhaps the most reliable and convenient method. It is as follows:

1. Clean the nails well with a knife.
2. Brush the hands for one minute with warm soap and water, giving special care to the nails.

3. Wash and soak the hands for one minute in alcohol over 80 per cent., to remove fatty matters and assist disinfection.

4. Then immediately into a three per cent. solution of carbolic acid, washing and rubbing the hands carefully for a minute, not forgetting the nails.

When this process has been carefully gone through with, the surgeon can be reasonably certain that his hands are aseptic. His difficult duty is then to keep them so; in other words, to avoid touching all unsterilized objects.

To recapitulate:—

1. Microorganisms of all kinds swarm about us; some are pathogenic, the majority harmless, so that a wound may or may not become affected, as chance directs.

2. Not enough attention is paid by most surgeons to the disinfection of their instruments. An examination of a series of instruments revealed a large number of various kinds of bacteria. No pus formers were found; but this must be regarded as accidental, as the conditions were favorable for their existence.

3. The disinfecting agents now in use, carbolic acid and corrosive sublimate, are not to be depended upon, as shown by the experiments of others and by my own observations.

4. The best way to disinfect instruments is to expose them for five minutes to streaming steam at 100° C., or boil them for the same length of time in a closed vessel, both before and after an operation.

5. As far as possible, only smooth, seamless instruments should be used.

6. Instrument cases should be looked after as presenting a source of infection.

7. The hands should be carefully cleaned with soap and water, soaked in alcohol and then washed in an antiseptic

solution, each step of the process to occupy one minute.

Creolin.

THIS new antiseptic, it is asserted, is obtained from a peculiar kind of coal which is selected with great care; the carbolic acid and benzole are distilled off and the residue is treated with resin and caustic soda. It does not contain a trace of carbolic acid, but is asserted by ESMARCH to be more active than that substance against pure cultivations of non-spore bearing organisms, but less powerful in its action on putrefying substances. It is recommended for its non-toxic action. It exists as a dark brown syrupy liquid.

Dr. Max Kortüm gives the following method of using creolin: Solutions have at first a milky appearance, but if allowed to stand for any considerable time become brownish, owing to the resinous principles and naphthaline salts separating out. For surgical purposes two solutions are employed—a 2 per cent. solution and a $\frac{1}{2}$ per cent. solution. The stronger one is used for disinfecting the hands, the instruments, and the surface of the patient's body. This has no undesirable effect on the skin or on the instruments. The weak solution is employed for irrigating wounds, for saturating tampons, and for moistening dressings, &c.

Creolin has a decided hæmostatic action, and yet even in strong solutions does not act as a caustic. It may, if very strong, cause smarting, but only temporarily.

In a case where a pulmonary cavity communicated with the cavity of the pleura which had been opened for empyema, copious hemorrhage occurring some days after the operation from the lung cavity, a plug soaked in a 2 per cent. solution of creolin was inserted

and stopped the hemorrhage at once, the only unpleasant effect produced being that the sputa tasted of creolin. In cases of large burns and bed sores, permanent baths of creolin water have proved very successful. In the case of bed sores, Dr. Max Kortüm suspends the part affected in a pan containing a 5 per mille solution.

In midwifery cases the vagina may be washed out with the $\frac{1}{2}$ per cent. solution, both before and after delivery. Where the perineum is ruptured this solution has an excellent effect when used to moisten compresses kept applied to the part. In a case of atony of the uterus post partum, a plug soaked in a 2 per cent. solution proved very successful.

Surgical dressings, gauze and moss applications, can be moistened every day or two with the creolin solution. In addition to watery solutions, creolin may be prescribed combined with oil or cerate, or as powder with boracic acid as a basis. Cotton wool is also impregnated with it.

The 5 per cent. oil may be used for itch or pediculi. In gonorrhea injections of a watery solution of from 1 to 5 per 1000 are very effectual, and in vesical catarrh a 1 per 1000 solution may be injected with advantage. Both in this affection and in gonorrhea creolin may also be given internally in pills containing from 1 to 4 grains each, three or four times a day.

Among others who have used creolin to advantage we may mention: 1. Fröhmer: skin diseases, bronchitis, etc.; as an antiseptic a 3 per cent. solution was used, it was also given internally in doses of 15 to 30 minims of the 1 per cent. solution. 2. Neudörfer speaks very highly of creolin in erysipelas, wounds, etc. 3. Jefsner: cystitis in a woman, bladder washed out with a one-half of one per cent. solution. 4. Hiller:

meteorism, flatulence, gastric dilatation and catarrh; also for irrigating the rectum in carcinoma cases, 1-500 solution. 5. Klamann uses a 1 per cent. creolin oil as a dressing. 6. Margaritti; purulent ophthalmia; instilled and applied on compress (1-400); gonorrhea, irrigations of 5 to 8 per cent. 7. Purtscher: conjunctivitis, all the varieties of ulcerative keratitis, etc.; 3 or 4 drops of the 1 per cent. solution several times a day. 8. Eisenberg recommends it in place of cor. sub., carbolic or iodoform. 9. Späth used a creolin gauze and emulsion; it stimulates the growth of granulations. 10. Sirena and Allesii: one to four drops of a 3 per cent. solution added to 90 drops of a broth culture, prevent the growth of the comma bacillus of cholera; solutions of creolin must be freshly prepared when wanted. 11. Rausche: harmless; does not stain instruments like cor. sub. 12. Baumm: uterine and vaginal injections; puerperal diseases: cracks and excoriations of the nipples heal better under cor. sub. solutions.

A stronger than 2 per cent. solution of creolin produces a violent burning if applied to mucous membrane or very sensitive epidermis. Elastic catheters are acted on by creolin in the same way as by carbolic acid.—*Med. Abstract.*

Antiseptic Power of Salol as a Dressing.

DR. CORNER uses salol for wounds after the part had been rendered aseptic by a 1 in 20 solution of carbolic acid. He does not claim for it greater power than iodoform, and probably other antiseptics, but it had advantage over some. It possesses a pleasant aromatic odor, can be used freely without fear of irritation or poisoning, is absorbent of moisture, which drying forms a hard but friable covering.

It will prevent putrefaction; it will

not destroy it when once established. It has been used in increasing frequency for several years at the Poplar Hospital, and with excellent results, in compound fractures and dislocations, also as a dressing in amputations, minor and major, and in compound comminuted and depressed fractures of the skull.

The first case shown was a compound comminuted depressed fracture of the frontal bone, in which the bone was elevated and some spicules removed. Afterwards the wound was washed with a solution of carbolic acid (1 in 20), the opening filled with salol, and a drainage tube inserted. The dressing was undisturbed for fourteen days, remained sweet, and healed on the twenty-sixth day. His temperature remained from the first under 100° .

A second case treated in January, 1889, was a compound fracture of the olecranon, head of radius, and humerus, opening the elbow joint, with considerable damage to soft parts, the elbow having been crushed by the passage of a railway engine over it. The olecranon was splintered and drawn up, causing serious tension of skin and necessitating removal of both portions. The antiseptic treatment and dressing were the same as in the previous case, but required changing after four hours and again next day, in consequence of oozing through. The parts were then left untouched for thirty days. The temperature went up the day after the injury and remained about 101° for three days, 100° for two days, and then fell to normal.

Two other cases were shown: one a crushed compound fractured finger, dressed twenty-one days before, and not exposed since, there having been neither pain nor elevation of temperature; the other was a compound fracture of the first phalanx of finger, only

dressed at the time of the accident, and left undisturbed for a month, when it was found perfectly healed. It was pointed out that this was the common experience in such cases, and that even if gangrene followed the parts remained sweet.—*Lancet*.

VENEREAL DISEASES.

Syphilis and Eczema Seborrhoeicum.

UNNA, in an exhaustive paper, discusses (*British Journal of Dermatology*) the occasional complication of syphilis of the skin with his so-called eczema seborrhoeicum. He concludes that the syphilitic exanthem is so complicated:

1. Wherever the separate spots of the exanthem are of various sizes, confluent and not sharply contoured.

2. Wherever the papules are somewhat wanting in the specific syphilitic color, and look rather of a fresh, yellowish-red.

3. Wherever perfectly smooth papules are completely absent, but where, on the contrary, the greater part of those present are covered with scales and fatty crusts.

4. Wherever the papules are found arranged in serpiginously progressive circles and rings.

5. Wherever the peculiar yellow of the seborrhoeic process is present round about the papules, and especially in the centre of the serpiginous circles.

6. Wherever the exanthem is accompanied by eczematous appearances, oozing, heat and tension.

7. Wherever it produces itching of greater or less intensity.

8. Wherever the syphilides occur on the confines between the forehead and hair, in the naso-labial furrow, on the sternum, between the shoulder blades, or in the sacral region.

9. Wherever they are concentrated

entirely, or for the most part, in the hairy scalp, in the axillæ, on the mons, on the genitals, about the anus; in short, on the hairy regions or places of contact.

10. Wherever the exanthem exhibits an unusual obstinacy to constitutional treatment, whilst it at once improves, or even heals entirely under an antiseborrhœic local treatment.

The practical deduction as to treatment from the foregoing is, that whenever the coexistence of a syphilide with a seborrhœic process, or wherever a purely seborrhœic eruption exists side by side with a syphilide, the treatment must consist from the very first in the local application of anti-seborrhœic remedies, such as resorcin, sulphur, etc., in conjunction with the general internal administration of mercury or iodine.—*New Orleans Med. and Surg. Journal.*

Conceptional Syphilis.—A Clinical Lecture.

PROFESSOR FOURNIER, whose teachings are as distinct as they are practically useful, has lately urged the importance of this subject from a prophylactic point of view, and in doing so has cleared up certain questions concerning it which have commonly been regarded as doubtful.

The women, says Professor Fournier, who in this way pay tribute to syphilis are usually young and recently married. A girl, healthy and pure, for example, becomes united to a man previously affected by syphilis and who had been apparently—though in reality incompletely—cured. She becomes pregnant by him, and then follow the usual constitutional symptoms. Her physician searches for the initial lesion, the chancre. But he fails to find it; and its intimate companion, the bubo, also fails to appear. The astonished physician looks to the husband for the cause, and not

only does not find it, but receives from him a solemn assurance that he has not been exposed for perhaps a year or two.

These are not exceptional circumstances; we meet with them sufficiently often in private practice; and we always find, in questioning the woman, that she is, or has recently been, pregnant, or has lately had a miscarriage. In 22 cases of conceptional syphilis brought together by Diday, there were 15 miscarriages. In the 7 cases born at term, or nearly so, all died sooner or later, with syphilitic manifestations. Dr. Fournier's statistics present nearly the same results.

The child's syphilis is a constant disease, and, like that of the mother, an abnormal or "headless" syphilis; *i. e.*, it has no primary period; the woman is not indebted for it to her husband or to any man; the cause of contamination is intimate contact with a syphilitic subject, the fetus.

Is this theory of the infection of the mother by the fetus, in contradiction to recent researches upon the passage of microbes through the placenta? We think that in reality these scientific investigations support the theory of this manner of infection. We know that a number of diseases, as, for instance, variola, measles and scarlatina, are transmissible to the infant by way of the placenta. Among the microbial maladies within this category we may cite acute, experimental septicæmia and chicken cholera. Well, it has been currently believed that the placenta constituted a filter which strains out the pathogenetic microbes. In reality it is nothing of the kind. Memorable experiments—those of Strauss and Chamberland—have shown that the placenta allows certain of these microbes to pass; they have demonstrated that

the bacteria of charbon may be detected in the blood of the fetus. It must be admitted that certain maladies may be transmitted by the mother to the fetus, through the placenta.

The facts of syphilis have long been tolerably well known. And we know that a healthy woman, pregnant from a healthy man—both healthy in the matter of active syphilis—may, after a few months of pregnancy, contract syphilis, and that the infant may be born a syphilitic subject. It is certain, therefore, that the intermediary of contamination is the placenta. The phenomena of exosmosis on the part of the placenta are commonly admitted, why not admit the probability of an inverse current and accept the fact of infection by endosmosis? If, through the placenta, syphilis may be transmitted from the mother to the fetus, why may not the same infection be transmissible from the infant to the mother?

Basing our opinions upon bacteriology and pathological physiology, we should all admit that there exists for women a special mode of syphilitic contamination; a healthy woman, conceiving a syphilitic infant by a syphilitic man, may be infected by her fetus. To this form of contamination Professor Diday has now given the name of conceptional syphilis. He was the first to perceive and to describe this morbid entity. To-day there is no longer any doubt whatever in our mind as to the truth of the facts we have cited, objections to the contrary notwithstanding.—*L'Union Médicale*.—*Medical Abstract*.

Radical Cure of Hydrocele of the Tunica Vaginalis.

BRIGADE-SURGEON SIBTHORPE reports from the General Hospital, Madras:

Twenty-six operations for paracentesis of hydrocele are recorded under the

head of minor operations in the senior surgeon's wards last year; in 14 of these a radical cure was attempted, undiluted tincture of iodine being injected in 10 cases, and pure carbolic acid in 4. As far as these small numbers go they show that there is not much to choose between the two methods; both appear equally efficacious in certain cases, and both are generally followed by some local and constitutional disturbance. The carbolic acid, however, appears to be followed by less pain than the iodine, though, with it, pain is by no means absent, as some surgeons would have us to believe.

Of the 14 cases, 9 can be claimed as cures: Case 2, with little local trouble, after six days; case 5, a double hydrocele (there was a good deal of inflammation), discharged cured on the twentieth day, the left being reduced to the size of a hen's egg, the right smaller; case 6, having been three times tapped and twice injected, left the hospital with a considerable amount of fluid in tunica, which completely disappeared afterwards under the use of tincture of iodine to the scrotum; case 7 was cured on the twenty-second day, the local trouble having been slight; case 8 left the hospital on the twenty-eighth day, the local trouble having been slight; case 9 left the hospital on the twenty-fifth day, having had only slight swelling after injection; case 10 left on the eighth day, with the swelling going down. All these cases were injected with tincture of iodine. Case 11 was tapped twice, and injected with pure carbolic acid; he had a good deal of pain and swelling, with some constitutional disturbance; a small abscess formed at the seat of puncture; this was followed by a sinus, which necessitated his being kept under treatment for a long time. Case 12 absconded a

month after the operation, with the swelling going down. Case 14 absconded the second day after the operation, so it was impossible to say what was the result.

There were partial cures in 2 cases, namely: Case 1, after injection with tincture of iodine on two occasions, suffered a good deal from pain and constitutional disturbance; he left the hospital with the part still enlarged thirteen days after the second operation.

Case 3 left the hospital on the fifth day after the operation with some swelling remaining. In case 4 castration had to be performed, as the two injections of tincture of iodine had been followed by failure, and the testicle was found atrophied when the sac was cut into. In case 13 suppuration following an injection with pure carbolic acid required free incision and drainage, which was eventually followed by a cure. The long time taken in the cure in some of these cases, and the histories of the failures, lead one to question which is the most suitable operation for the cure of old standing hydroceles, where the tunica is much thickened and very much enlarged. No doubt the treatment by injection is by far the most suitable for moderately sized and comparatively recent tumors.

I would like to call attention to an interesting paper by Mr. J. S. McArdle, published in the *Dublin Journal of Medical Science* on this subject. He alludes to the fact that the operation of incision for the radical cure of hydrocele is as old as the time of Celsus, but that it had fallen into disuse, and has been only revived since the antiseptic method of dressing wounds has come into use. He gives the following description of the methods now in use:

Incision (Volkmann).—An incision is made from the external abdominal ring

to the base of the scrotum, and reaching down to the tunica vaginalis. That membrane is incised along its entire length, and bleeding vessels ligatured. The tunica vaginalis is then washed with a 3 per cent. solution of carbolic acid, and its edges applied to those of the skin by numerous points of fine silk suture; the dressings are then applied. Englisch remarks that it is well to leave the ends of the sutures long, so as to avoid the difficulty of finding them in the swollen tissues when, on the third day, their removal becomes necessary.

Partial Resection. (Julliard.)—After the skin and tunica vaginalis have been cut, as in Volkmann's operation, the redundant portions of the latter are removed and the edges of the remaining portion brought together with fine catgut. A drainage tube is then laid in the wound, up to but not into the tunica vaginalis, and the skin wound closed.

Complete Resection of the Parietal Tunica Vaginalis. (Bergmann.)—After section of the skin and tunica vaginalis, the latter is dissected off close to the epididymis and testicle. Bleeding vessels are then ligatured, a drainage tube laid in, and the skin wound closed by numerous points of silk suture. In all the operations a 3 per cent. solution of carbolic acid is used for washing the parts. Bergmann claims that sloughing of the tunica vaginalis, cellulitis, necrosis of the testicle, and scrotal abscess follow injection more frequently than the method of incision or resection. He also states that the method of excision or incision takes very little longer, and gives the following relative dates of healing after the different methods:

Injection.—Billroth, 9th day; Stoltz, 9th day; Weiss, 8th to 9th day.

Incision.—Volkmann, 8th to 10th day; Küster, 14th day; Lister, 17th day; McArdle, 12 to 14th day.

Excision.—Julliard, 10th day; Bergmann, 11th to 12th day; McArdle, 7th to 12th day.

The chances of recurrence are much less after entire incision, partial resection, or complete resection, than after injection. Mr. McArdle quotes 315 cases of injection by different surgeons in which the disease recurred in 13 per cent.; 245 cases of incision in which it recurred in 2.4 per cent.; 53 cases of partial resection in which it recurred in 1.9 per cent.; and 22 cases of complete resection in which the disease did not recur. He only recommends these methods for cases in which the trial of injection has been made and failed.—*British Medical Journal*.

DISEASES OF THE SKIN.

Treatment of Acne Without Arsenic, Sulphur Ointments or Lotions.

DR. G. H. FOX, in a paper read before the Medical Society of the County of New York, said :

It was not to be inferred from the title that he objected to the use of arsenic, sulphur ointments, or lotions ; he simply believes their field of usefulness to be limited. On the average, it is probable arsenic does more harm than good in these affections, because it is administered without discrimination.

He divided acne, for convenience in treatment, into two forms, the irritable and the indolent. In the irritable form the skin is usually fine and soft, quickly inflamed by applications, and admits of no other than the most soothing treatment. This form of the disease is largely of a reflex nature, due especially to disorders of digestion and of the sexual organs. It is chiefly benefited by diet and internal remedies. The indolent form shows usually a coarse, doughy, often greasy skin. In these

cases the glands, which are the seat of comedones and pustules, should be evacuated ; in other words, the skin should be kept clean ; soap and water, ointments and lotions are not sufficient.

Most physicians place much reliance upon arsenic as an internal remedy in acne, but on the whole it is probable that patients would get along better if it were unknown. Sulphide of calcium has been recommended highly, but is likely to lead the physician to neglect more important measures. Ergot possesses greater value than is generally attributed to it, its chief benefit being achieved in the indolent form. In irritable acne, Dr. Fox now seldom uses the many internal remedies with which he has formerly experimented. The chief principles of treatment to be followed in acne, are the regulation of the diet and the use of local massage. Massage can be applied by squeezing out the comedones, emptying the pustules, and scraping with the round curette, kneading with the fingers, etc. But no fixed plan of treatment can be laid down for all cases.—*Medical and Surgical Reporter*.

Clinical Study and Analysis of Cases of Psoriasis and Their Treatment.

DR. L. D. BULKLEY, in a paper read before the Medical Society of the County of New York, gives a review of twenty years' experience with the affection. The disease, being one of the most common and persistent of skin affections, deserves careful study. It rarely attacks the skin of the palms of the hands or soles of the feet. Dr. Bulkley has not seen it on the tongue. It formed over 4.3 per cent. of all the cases of skin disease which had come under his observation. According to statistics, it seems possible that changes in temperature with much moisture has something

to do with its causation. He has treated 264 cases altogether. His statistics harmonize in most respects with those of general collections. He has found that between ten and fifteen years of age the female patients were double the number of male patients. While between fifteen and twenty-five years of age the males were double the females. Over forty per cent. of all cases appear before the second decade of life.

The youngest patient seen by Dr. Bulkley was a little over a year old. Over one-third of all his cases had lasted over ten years, and some as long as forty or fifty years. Many patients ceased their visits long before the eruption disappeared. Over forty per cent. of his cases remained under observation less than six months; quite a proportion of these, however, yielded to treatment, and were apparently cured. As the disease advances in duration, a smaller proportion is benefited. But sometimes careful and continuous treatment will keep the eruption almost entirely in check even a great number of years.

The disease has scarcely any tendency to self-limitation. Although its virulence is largely due to the patient's carelessness, yet there are cases which prove intractable, however carefully the treatment may be carried out. It is most curable in children. The cases in patients between the twentieth and twenty-fifth years of age are very rebellious. The treatment should include diet, general hygiene, medicinal measures, the bath, internal and external medication,

Psoriasis is not a local disease, but a constitutional one, more or less akin to rheumatism and gout. Excessive meat eating increases its severity, and the use of stimulants precipitate an attack. Oils and fatty matter, if properly digested, favor a cure. Pure wool should be

worn next the skin, and sudden changes of temperature avoided. Patients get along better in a warm, equable climate. As regards internal medication, arsenic undoubtedly causes the eruption to disappear in some cases. He had one patient who had taken, it was estimated, a gallon of pure Fowler's solution within fourteen years. Alkalies are also beneficial. Local applications may prevent in a large degree development of the eruption, if they are applied early. He has about abandoned chrysophanic acid in private practice. He has used more of white precipitate ointment in various degrees of strength than of any other local application. Mineral waters seem to have little influence on the disease. Among them sulphur waters would hold the best place.—*Ibid.*

Neuralgic Herpes Progenitalis.

DR. WILLIAM G. DAGGETT reports an interesting case in the *University Medical Magazine*, of herpes progenitalis of neuralgic origin. There is no doubt of the neurotic origin of simple herpes, which is a close congener of zona, but in the case detailed by Daggett there was observed first, a pain in the left foot. Then the pain extended to the leg, thigh and buttocks. On the third day a crop of herpetic vesicles would appear on the glans penis. These attacks would occur every three or four weeks. An astringent local wash caused a disappearance of the local lesions. To this was added pills of iron, arsenic and strychnine, which appeared to have acted in a successful manner.—*St. Louis Medical and Surgical Journal.*

Post Mortem Warts.

THESE excrescences are generally noted about the hands and arms, and have been demonstrated to be of tubercular nature, by Riehl and Paltauf.

These lesions are contracted, as a rule, by those who are largely engaged in the handling of post-mortem specimens and in making autopsies. J. BRAQUEHAYE, reports in the *Annales de la Polyclinique de Bordeaux*, the case of a butcher who, while hanging up a quarter of beef, scratched his left wrist. The lesions were made by splinters of bone and did not heal very rapidly. About a month later he presented a number of anatomical tubercles about the left wrist. The condition was relieved by means of the curette. A careful examination revealed the absence of tuberculosis in the individual as well as in his family.—*Ibid.*

Eczema Caused by Iodoform.

DR. H. CAMPBELL POPE writes in the *Lancet*, that he recently had under his care a case of inflamed bursa near the elbow joint, which was opened antiseptically and dressed with iodoform gauze. A violent attack of eczema ensued, spreading over the whole of the limb. The eczema was cured by oleate of zinc ointment. The bursa, having filled a second time, some months afterwards, was opened and dressed as before, with a like result,—namely, an attack of eczema. On discontinuing the iodoform gauze and dressing with oleate of zinc ointment, the attack soon passed off. On a third occasion, before the wound had entirely healed the scab was accidentally removed. Iodoform ointment was inadvertently prescribed, and eczema appeared for the third time. It would seem in this case that iodoform was the exciting cause.—*Therap. Gaz.*

DISEASES OF THE EYE AND EAR.

Value of the Electro-Magnet in Removing Particles of Iron from Vitreous Chamber.

A YOUNG German was pounding iron with a hammer, when a small particle

came off and flew with great force into the right eye, striking the ball in the lower sclero - corneal junction, cut through, and lodged somewhere in the vitreous chamber. This occurred several weeks before I saw him. The eye was slightly red and not painful to amount to any thing, but was entirely blind. Close inspection revealed the point where the foreign body cut through the sclero-corneal junction and its visible track, within, showed conclusively that it had gone into the vitreous chamber. The vitreous humor was so cloudy that nothing could be seen, so it was impossible to even approximately locate the piece of iron. But there could be no doubt that it was "somewhere."

What is the proper thing to do? The eye is hopelessly lost so far as sight is concerned, and if let alone, sooner or later, in all probability the ball would have to be enucleated—could the foreign body be caught with the electro-magnet? It had been there several weeks and was certainly surrounded by a large mass of tough, semi-organized lymph, but I concluded to make an effort to "catch" it with the magnet.

My friend, Dr. Barck, kindly assisted in the effort. We punctured the sclerotic between the external and inferior recti muscles just in front of the equator, and passed the point of the magnet into the vitreous humor and moved it around in all directions, but failed to get the piece of iron. We repeated the effort eight or ten times and had to give up the search. We urged immediate enucleation, but the young man would not consent. We prescribed atropine solution locally and anodynes internally, if the eye should become painful.

The patient went home to Illinois with positive instructions to return in two weeks. I have not seen him since. I accidentally learned that no considerable

reaction followed the operation. Some months later the patient went to Chicago and had the eye enucleated.

As yet I have not been able to learn where the foreign body was located.

I have made several other engagements to make this operation, but the patients failed to come. It is an undesirable kind of an operation, as it involves considerable responsibility and there is great uncertainty in the result. The proper time for the operation is immediately after the accident, when the foreign body can be definitely located and easily reached. It is almost certain that the magnet would not have sufficient power to pull a piece of metal out of a mass of lymph, even if it should be brought into actual contact with it. I greatly doubt the propriety of the operation in old cases where the foreign body has to be blindly fished for.

In a recent article on this subject Dr. E. Neese, of Kiew, has compiled the following statistics of the operation: Eighteen operations in all. Only in five cases were the results permanent; that is, the foreign bodies were removed and the forms of the balls preserved. Of these, only two could count fingers. All of these cases were operated upon next day after the injury. Two other cases were momentarily successful, but had to be enucleated later. In eleven cases the operation was a complete failure!

These statistics certainly do not commend the operation in a convincing way as a method for the removal of foreign bodies from the vitreous chamber. —*St. Louis Med. and Surgical Journal.*

Hearing Restored after Deafness of Twenty-five Years' Standing, by a Surgical Operation.

DR. WHITE (*Virginia Med. Monthly*):

The patient was a man who had been wounded at the battle of Chancellors-

ville, and in consequence lost the hearing of the left ear. The bullet struck him in the cheek in front of the ear, passed into the bone and out through the left mastoid process, crushing the bony parts of the external meatus auditorius in its passage. The union of the crushed fragments resulted in a bony occlusion of the meatus.

In December, 1888, he applied to Dr. White to see if there was any chance of restoring the defective ear. On examination it was found that he was perfectly deaf to all extraneous sounds, such as voice, watch, etc., but he could hear the tuning-fork when placed at the apex of the head or on the teeth.

As the nerve perception by bone conduction was good, Dr. White determined to perform an operation in an endeavor to restore the external meatus. The bony callus was attacked with mallet and chisel, and a shallow opening in the line of the meatus was made by chipping away the bone. For fear of wounding the membrana tympani, the chisel was then laid aside, and the operation was completed with the aid of the dental engine by dental burrs and drills. When the opening was sufficiently large and deep to obtain a view of the drum-head, it was found that the deepest portion of the osseous meatus, about one-eighth of an inch in front of the drum-head, had not been filled up, and a small space existed between the inner wall of the bony obstruction and the drum-head. The artificial meatus was made as large or larger than the normal passage-way, and the drum-head was almost normal in appearance.

There was considerable irritation about the parts for some days, which soon subsided. Hearing gradually improved, until ten days after the operation, when a loud whisper was distinctly audible to the patient.—*Analectic.*

THE AMERICAN MEDICAL DIGEST.

PART III.

Diseases of Women and Children.
and Obstetrics.

DISEASES OF WOMEN.

Chronic Endometritis.

INFLAMMATION and hypertrophy of the mucous membrane of the body of the uterus are frequently seen as the result of frequent and severe parturitions, as accompaniments of ovaritis, salpingitis, peritonitis, and parametritis, and associated with fibroid or cancerous tumors. The statement that the lesion of endometritis consists in the conversion of the ciliated epithelium of the mucous membrane into pavement epithelium is erroneous.

De Sinéty describes three varieties of vegetations which are to be found in this disease: 1, Glandular, which are developments of the hypertrophied glands; 2, embryonal, formed from embryonal tissue, and containing small vessels and traces of glands; 3, vascular, formed by dilated vessels and analogous to blood tumors.

The modifications of the stroma of the mucous membrane have been well described by Schröder and Ruge.

The authors of this paper made their investigations upon fresh uteri removed by Péan from living subjects, two cases being illustrations of simple metritis, three of fibroid tumors, and three of cancer of the cervix. These specimens enabled them to see not only the mucous membrane under conditions favorable for study, but also the entire wall of the uterus. The uterus being divided longitudinally, the mucous membrane was found of a grayish or reddish color, and in some cases of a bright red color; it was usually smooth at the surface, sometimes corrugated, and could be easily scraped off with a scalpel. When scraped with a sharp spoon it was found difficult to distinguish and separate the mucous membrane from the uterine muscle. In most cases it was found

that the inflammatory process did not amount to more than a hypertrophy of the glands.

In endometritis following epithelioma of the cervix the inflammatory lesions are contiguous to the cancerous zone of the cervix. In metritis, which follows other inflammations of the genital apparatus, the lesions of the mucous membrane are not uniform. In those cases in which the surface has a fungous appearance there are eminences and depressions which constitute the condition variously known as endometritis villosa, or fungosa, or granulosa, or vegetans, and which has been described by Sinéty and Slavjanski. These vegetations represent, in some cases, true pedunculated tumors. Less frequently the papillomatous prolongations, or hypertrophic glandular development, contain small cysts which have the appearance of Nabothian follicles. The glandular ducts are usually lined with a single layer of cylindrical epithelial cells, the vibratile processes of which can only be seen in very fresh preparations. The lumen of these glandular processes is usually empty, but sometimes it is filled with epithelial or lymphatic cells in process of degeneration.

The lesions of the superficial layer of the mucous membrane are more important than exist in those more deeply situated. The elements of this layer may become necrosed and disintegrated after having undergone a true maceration. The interglandular cellular tissue is normally present in very small quantity, but when inflamed its nuclei increase in size, many new cells appear in the interstices of the glandules, and the vessels increase in number and in size. There may be a general infiltration by lymphatic elements; ordinarily the glandules seem

distributed in a stroma of young embryonal cellular tissue.

Change in the stroma of the mucosa and new formation in the glands appear to be related phenomena. If we compare the changes, in the shape of glandular hypertrophy, which occur in chronic metritis with those which sometimes occur in the intestine, we find the mucous membrane of the latter above a delicate layer of smooth muscular tissue, but in no cases in which there is glandular hypertrophy of this mucous membrane is the muscular layer invaded except in cases of cancer.

There is great difficulty in the anatomical diagnosis between glandular hypertrophy and epithelioma of the neck of the uterus in many cases, but in the majority of cases the distinction can be drawn. In simple glandular hypertrophy there is generally a layer of cells between the bottom of the follicles and the connective tissue, which serves as a foundation for the implantation of the ciliated epithelium lining the follicles, and the ciliary processes project into the lumen of the follicles. The interglandular tissue has a less marked infiltration of lymphatic elements than is the case in epithelioma, and the layers of young connective tissue are arranged in lines parallel to the direction of the ducts of the follicles.

In epithelioma, on the contrary, there is not only hypertrophic enlargement of the glandules, but an abundant multiplication of cells also which quickly lose the typical characteristics of ciliated epithelium, the proliferation causing complete obstruction of the ducts of the glandules. The cells, after their original form has been changed, may present a polyhedral or a cubical form. When the walls of the glandule are broken, the characters and conditions of epithelioma appear. In general, it may be

said that there is only a brief period in which it is possible to confound endometritis chronica with epithelioma.

In conclusion, it would seem, therefore, that it would usually be easy to establish a histological diagnosis if one possessed the entire uterus. If, on the other hand, a diagnosis is to be made from the characteristics of fragments obtained by scraping, which may or may not present the conditions of glandular hypertrophy, it cannot be done satisfactorily unless one has specimens which show the entire depth and area of the glands.

Early Treatment of Malignant Disease of the Uterus.

DR. GEORGE ERETY SHOEMAKER, in an article published recently in the *Coll. and Clin. Record*, among other interesting statements, closes his paper with the following suggestions and summary :

For cleansing purposes in the general conduct of a case, an experience of a considerable number of cases in the cancer annex of the Home for Incurables, among the out-patients of the University Hospital and the St. Clement's Dispensary, as well as in private practice, leads to the preference of permanganate of potash solution. It is cheap, non-poisonous, unirritating and effective. Creolin is now on trial, so far with very satisfactory results.

Hemorrhage, if not controlled by alum or other astringent, may often be arrested by pressure so applied by tampon as to bear directly upon surfaces, and not slide over them. If very considerable, it will call for the use of the curette and the hot iron.

For pain antipyrin has not proved very satisfactory, though not extensively tried. In one case it gave great relief to general nerve pains, but did not

greatly affect the cancer pain. Cocaine is, of course, too transitory and too superficial in action.

Nothing will take the place of opium, guarded by atropia, in the relief of decided pain. Other drugs give much help in insomnia and restlessness when not caused by definite pain from nerve involvement. The opium habit, when at length formed—and it may by care be long deferred—is by far the least among evils. No definite improvement in the case, as a whole, has ever seemed to follow the use of drugs given for the disease itself.

A summary may be made as follows :—

a. Early diagnosis is all important, and should not be deferred until gross changes have occurred.

b. Examination should follow slight suspicions from the treacherous character of the symptoms. If not conclusive, it should be made by a trained hand.

c. The microscope will sometimes detect before other means will.

d. Heredity is a doubtful cause, traumatic origin very probable.

e. Lacerations of the cervix, where the growths usually begin, should be repaired if causing irritation, and erosions should be cured. If erosions are stubborn, or otherwise suspicious, they should be pared off.

f. In epithelioma especially, the disease is at first local, and if taken early complete immunity is secured sometimes and always great saving of time and suffering.

g. From an operative point of view there are three periods in any form of malignant disease :—

1. Early, when operation should be immediate and as radical as possible, without extirpation of the uterus.

2. Intermediate, when, eradication

being impossible, nothing should be done unless demanded by severe hemorrhage or extreme pain. The length of this period is indefinite, and depends on the rapidity of growth.

3. Late, when scraping or burning may be done repeatedly, to palliate symptoms and retard growth.

On Gas Cysts of the Vagina.

PROFESSOR OBRZUT (pronounced "Objüt"—a Polish name), of Prag, Bohemia, says (*Wiadomosci Lekarskie*) that Dr. Jacobs, of Bruxelles, working under his guidance, has succeeded in elucidating the pathogenesis of a rare and curious affection of the vagina. This consists in the development of multiple small sized cysts with gaseous contents, described by Professors Chiari and Breisky under the name of "emphysematous vaginitis." While both of the authors just named, as well as Dr. Piering, believe that the disease represents primarily a lesion of the vaginal lymphatic apparatus, Drs. Obrzut's and Jacobs's researches have shown that the cysts originate solely in the vaginal blood vessels, the lymphatics remaining wholly intact. According to the latter authors, the first stage of the pathological process seems to consist in œdematous swelling affecting fairly circumscribed isolated areas over the vascular wall, the second stage is a progressive, correspondingly limited or localized obliteration of the vascular lumen ; while a third stage consists in a more or less considerable gradual dilatation of the vessel above its stenosed portion. Those dilated departments of the vascular tube in the course of time are transformed into cystiform structures, while their bloody contents undergo disintegration which, amongst other products, yields odorless and colorless gases. As to the microbes described by Eisenholz,

they could not be discovered in the cysts by any method of examination.—*Medical and Surgical Reporter*.

Leucoplasia and Cancroid of the Vulvo-vaginal Mucous Membrane.

BESC (*El Progreso Ginecologico y Pediatra*). The following are the author's conclusions :

1. Leucoplasia, which has been described heretofore, as it appears in the buccal mucous membrane, appears also in the vulvo-vaginal mucous membrane.

2. It is an affection which is characterized by white patches, and its lesions consist in a thickening of the epithelial coat and the corium.

3. Like buccal leucoplasia, the form which involves the vulvo-vaginal mucous membrane may be the first step in the evolution of papilloma and cancroid.

4. Leucoplasia and cancroid are distinct affections : the first plays the part of an irritant and prepares the soil for the evolution of a second.

5. In regard to treatment :

- a. The leucoplasia patches must be treated in the beginning with hygienic and medicinal means.

- b. If the patches are rebellious to treatment, and are circumscribed, they should be extirpated.

- c. If papillomata have developed, they should be removed as thoroughly as possible, the section extending well beyond the limits of the diseased tissue.—*Annals of Gynecology*.

Removal of a Submucous Fibroid.

DR. R. G. WIENER reported a case of this sort. There had been considerable pain and hemorrhage, and the appearance of a large mass at the os uteri. He had attempted removal with the écraseur, but had broken the wire in trying to sever the broad base by which it was attached. He had finally used

the spoon-saw. With this and some manipulation he had removed the tumor, and the patient was doing well.

Dr. J. R. Goffe, who had assisted in the operation, remarked on the slight hemorrhage which followed division of the stump. Submucous fibroids caused great discomfort to the patient, yet were easily removed ; and their removal was followed by full relief, making it perhaps the most satisfactory simple operation in gynæcology. He had operated only where the tumors were pedunculated.

Dr. W. G. Wylie remarked that not all uterine fibroids were so easily removed as when attached by pedicles. Where they were deeply seated and not encapsulated, even if the os was widely dilated, it was easy to penetrate the uterine wall in attempting to free them by the spoon saw, as had happened several times. Here twisting and snipping with the scissors was a better method. When the capsule was distinct they came out completely. But otherwise there was much danger that a portion remaining after partial removal should suppurate, its vitality being just enough lowered to allow of this. Many patients had been lost thus. In reply to a question from the president as to what he did with the capsule, when there was one, Dr. Wylie added that after the tumor had been removed he pulled down the capsule and tied off all he could of it. He douched the cavity with very hot water, and allowed the remainder to stay. He had been compelled to use forceps to extract two or three very large fibroids, and once had been obliged to cut the perinæum.—*N. Y. Medical Journal*.

Iodoform Wick as Uterine Drainage.

DR. MIKHAIL A. VOSKRESENSKY, of Tchernigov, highly speaks (*Novosti*

Terapii), of draining the uterine cavity by means of an "iodoform wick." (Russ. *fitil*.) The latter is made of soft cotton threads, treated by a 10 per cent. ethereal alcoholic solution of iodoform (and kept in stock, in a hermetically closed vessel). The wick, which must be sufficiently thick to fill up the cervical lumen well, is introduced into the womb by means of Schröder's long forceps. Its removal in the same way is very easy; it may be withdrawn, at will, either as a whole, or thread by thread. Dr. Voskresensky resorts to the drainage in cases of purulent puerperal endometritis, retention of the ovum or placenta, abortion and puerperal endometritis of various forms, operating on the cervix, vagino-plastics, total vaginal extirpation of the uterus, etc. The results are said to be most satisfactory. A uniformly favorable after course in his cases of gynecological operations is attributed by the author mainly to use of this wick-drainage. —*St. Louis Med. and Surg. Journal*.

Leucorrhœa.

IN cases of leucorrhœa taking the place of the menstrual flow, Professor PARVIN advises the administration of tinct. canth., ℥ v., t. d., and increase to ℥ xv, t. d.—*Coll. and Clin. Record*.

Dysmenorrhœa.

CASES of dysmenorrhœa suitable for dilatation are those with a point of tenderness to the sound at the internal os, and associated with ante flexion.—PARVIN.—*Ibid*.

Cervical Leucorrhœa.

IN cervical leucorrhœa, Professor PARVIN advises, in addition to other measures, the following injection: R. Picis liquidæ, 3 j; aquæ, Oij.—M.—*Ibid*.

Manganese in Certain Forms of Dysmenorrhœa.

DR. C. O'DONOVON (*Medical News*) says:

1. The manganese compounds are valuable additions to the therapeutics of dysmenorrhœa, from which, in a certain number of properly selected cases, great benefit may be expected.

2. Their use does not interfere in any manner whatever with the administration of iron, or the vegetable tonics; but rather aids and is aided by them.

3. The best results from the use of these remedies may not be obtained at once, and failure should not be confessed until after a continuous trial, lasting for three months.

Tight Lacing in Russia.

IN the *Vratch*, Dr. BORIS I KIANOVSKY relates a series of experiments which he recently carried out with the view of ascertaining the influence of tight lacing. The experiments were made on 30 female patients between 18 and 44 years, of whom 28 were more or less inveterate tight lacers (eight of them since their eleventh or twelfth year). The following is a summary of his results:

1. The corset lessens respiratory movement of the thorax, and diminishes the vital capacity as well as the force of the inspirations and expirations, the inspiratory movements being particularly affected.

2. The thorax being compressed and the amount of the inspired air being diminished, the corset necessarily gives rise to chronic "oxygen starvation," which is one of the essential causes of dyspnœa and cardiac palpitation on brisk walking (fatigue being soon felt on physical or mental exertion), loss of appetite, faintness, and other kindred symptoms, such as are usually associated with tight lacing.

3. The arterial tension falls on putting on a tight corset, and in habitual tight lacers it is generally below the normal standard ("in consequence of arterial anæmia.")

4. The effect of stays on the frequency of the pulse and respiration is well shown by the following: The women were made to run a distance of 980 feet with moderate swiftness without corsets and tight laced, all other conditions being identical. After a run without corset the pulse was found to be 136, 140, and 156, and the respiration 32, per minute. In the same women tight laced, the pulse was found to be 144, 160, 176, and the respiration 48, 60, 64.—*British Medical Journal*.

The Relation Between Chlorosis and Menstruation.

At the meeting of the Obstetrical Society of London, Dr. W. STEPHENSON, Professor of Midwifery, University of Aberdeen, read a paper on the relation between chlorosis and menstruation; an analysis of 232 cases. The author observed that in the rapid progress of uterine specialism, chlorosis in its relation to menstruation had been too much neglected by the gynecologist.

The 232 cases were divided into two groups: 1. where the illness was primary and occurred before the twenty-third year, comprising 183 cases; 2. where the attacks were of the nature of relapses after a period of good health (49 cases). Dr. Stephenson regards chlorosis as due to a constitutional state; but the diathesis is not necessarily associated with an impairment of the development of the body, and is not, to any marked degree, connected with the defective health previous to the onset of the disease. The influence of the chlorotic constitution on menstruation before chlorosis sets in was first discussed.

Tables were given to show that the tendency of the chlorotic diathesis is to accelerate the age at which menstruation first appears, and that chlorosis by itself is not a cause of retarded appearance of the catamenia. At the same time, in one-half of the cases, the functional activity is defective, and is chiefly characterized by lengthening and irregularity of the intervals and scantiness in the amount of the flow.

The author's statistics were against the opinion that there is a menorrhagic form of chlorosis. In 96.6 per cent. the effect was to diminish the activity of the function, the remaining fraction being complicated with ovarian irritation. In 58.7 per cent. menstruation became scanty and irregular, and in many cases painful, while in 37.8 per cent. there was amenorrhœa for various periods. A table was given to show that there are two marked chlorotic periods: the one, of primary attacks, from the age of fourteen to twenty-one; the other of secondary attacks, from twenty-four to thirty-one.

The number of cases of the disease presents a regular curve, beginning at the age of fourteen and rising steadily to a maximum between eighteen and nineteen, then rapidly falling, to disappear altogether at twenty-two. The tendency to secondary attacks manifests itself first at the age of twenty-four, rises to a maximum between twenty-six and twenty-eight, again to disappear at thirty-two. That there may be a third period is probable, as two cases were recorded at the ages of thirty-nine and forty-one. This law applies to attacks of the disease with distinct intervals of good health between, as distinguished from the simple relapses, after periods of imperfect convalescence, frequently met with after a primary attack. The curve of menstrual age, compared with

the curve of the onset of chlorosis, does not bear out the opinion that "to most in etiological importance is the period of the first appearance of the catamenia."

The fact of a periodicity in the attacks is also against it. The cause of this periodicity was considered, and the general conclusion arrived at is that imperfect evolution of menstruation, as evidenced by scantiness of the flow and irregularity of the periods, is as regular a feature of chlorosis as the imperfect evolution of the red corpuscles of the blood.

These constants are independent one of the other, though a close relationship exists between them whereby the reproduction and development of the red corpuscles of the blood are governed by, or form part of, the menstrual cycle; while both are influenced by a greater rhythmic action which determines the time and activity of development, growth and reproduction.—*Lancet*.

Micro-Organisms in the Genital Channel of the Healthy Woman.

WINTER publishes a careful work in which he attempts to answer the questions: 1. In what parts of the genital channel of the healthy woman are bacteria found? 2. Of what kind are they? 3. Are any among them pathogenic? In forty Fallopian tubes which were obtained during operations, no microorganisms were found. Of thirty extirpated uteri twenty-two were likewise found free from bacteria, whilst in eight cases they doubtless got into the uterus through previous digital or sound examinations. The cervix examinations made on living individuals showed microorganisms (cocci and bacilli); the latter largely increased in number during pregnancy. The same was true of the vagina. The inner os of the uterus forms, consequently, the border between

the parts infested with bacteria and those free from bacteria. As regards the question of pathogeny, the pus cocci (staphylo-cocci) were found in one-half of the cases in the secretions. But the experiments with vaccination proved them to be of lessened virulence, probably being weakened by the secretions of the other bacteria.

Of practical importance is the inference from these tests that internal examinations of the uterus should be preceded by the most painstaking disinfection of the vagina and the cervix. It is shown that when substances subject to decomposition: blood, ovarian membranes and remnants of the placenta, are present in the uterine cavity, self-infection may take place through spreading of pathogenic germs from the vagina.—*Correspondenz-Blatt für Schweizer Aerzte*.

Amenorrhœa.

FOR a young girl, æt. 17, with amenorrhœa due to mental disturbance, Professor PARVIN ordered: *R. Ferri sulph. exsicc., terebinth, albæ, aa gr. j.; aloes, gr. ʒss. M. Ft. pil. j. Sig.—One ter die.—Coll. and Clin. Record.*

On Mechanical Treatment of Prolapsus Uteri.

IN the Polish monthly *Wiadomości Lekarskie*, Dr. F. SIELSKI, house physician to the Town Hospital, Lvov, Austrian Galicia, publishes a very instructive preliminary note on the treatment of uterine prolapsus by massage after Thure-Brandt's method, which has become of late fairly fashionable not only in Sweden (the inventor's home) but also in Russia and Poland. According to Dr. Sielski, of all Thure-Brandt's manipulations, only the *luftingen* or "lifting up" of the womb from the pelvis has a genuine curative value, since

it represents nothing else than a reduction *en masse* both of the displaced womb and *enterocele vaginalis posterior*, which is invariably present in all cases of uterine prolapsus. Starting from that supposition, the author has considerably simplified and improved the method. He has invented an instrument which he calls an *elevator uteri*, and which consists of an ordinary uterine sound bearing a circular, flat disc, of the size of a kreuzer (penny). The disc is fixed at some distance from the uterine end of the sound, which varies according to the length of the uterine cavity in individual cases. Having introduced the instrument into the womb in the usual way, up to the disc, he proceeds to carefully lift up the uterus (resting with its os on the disc) from the pelvic into the abdominal cavity, carrying up the organ as high as possible in the given case without causing any painful sensations to the woman. The procedure is repeated once daily. Having employed the method in five successive cases, he has obtained a complete and permanent cure in every one of them, the duration of the treatment varying from two to four weeks.—*St. Louis Medical and Surgical Journal*.

Galvanism in Dysmenorrhœa and Other Pelvic Pains.

DR. FRANKLIN H. MARTIN, Professor of Gynecology in the Post Graduate Medical School of Chicago, discusses in the *North American Practitioner*, the employment of galvanism in the treatment of dysmenorrhœa and other pelvic pains. He employs a current strength of 100 milliampères. Externally he employs what he calls "a large animal membrane abdominal" electrode, large enough to cover the whole surface of the abdomen between the pubes and umbilicus. The vaginal electrode

described consists of a metal exposure of 16 square cm., surrounded with wet absorbent cotton; it is crowded well up into the space between the uterus and the vaginal walls on one or the other side of the cervix, as may be indicated by the requirements of the case. With the electrodes held firmly in position, the current is gradually turned on until it reaches a strength of 100 milliampères. Here it is allowed to rest for five minutes when it is gradually turned off, and the treatment finished.

Dr. Martin reports three cases in which this treatment was adapted to the relief of pain, and expresses the opinion that in certain conditions, in which pain is often the predominant symptom, galvanism will prove an infallible and prompt remedy. His propositions are:

1. Do not advise the removal of an ovary for persistent pain, until galvanism has been systematically and thoroughly applied, if any of the following conditions are suspected as a cause: *a.* chronic ovaritis, either with or without hypertrophy; *b.* where inflammatory deposits, either with or without adhesions, surround both organs; *c.* ovarian neuralgia; *d.* all pain coincident with menstruation; *e.* in all cases of ovarian pain not known to be the result of active, acute inflammation; septic or specific inflammation; and cystic tumors.

2. Galvanism is a sure remedy for all pain resulting from tubular diseases, except when septic or specific inflammation is the cause, or the presence of pus is demonstrated.

3. Galvanism is positively indicated in dysmenorrhœa or other pelvic pain, when a result of chronic metritis; when a result of hyperplastic enlargement of the uterus; when a result of fibrous or other non-malignant growths of the uterus.

4. Galvanism is emphatically indicated in pelvic pain when a result of old pelvic exudates of all kinds, provided acute inflammatory action is absent and the presence of pus is not suspected or demonstrated.

5. Galvanism is indicated in pelvic pains, arising from reflex disturbances, or hystero-neuroses, the condition well defined by Englemann as a phenomenon which simulates a morbid condition in an organ that is anatomically in a healthy state.

6. Galvanism is indicated in dysmenorrhœa, when the result of cervical lacerations, with unyielding cicatrized plugs; when the result of cervical endometritis or uterine vegetation.—*Coll. and Clin. Record*

DISEASES OF CHILDREN.

Lung Diseases in Congenital Syphilis.

DR. HELLER (*Arch. Pediatrics*):

Three different forms of lung disease occur in connection with congenital syphilis, any one of which may occur alone, combined with another, or with both the others,—gummata, white, and interstitial pneumonia.

1. White pneumonia in its uncomplicated form is rarely seen, is found only in still-born children, or in those who have died shortly after birth. It is most frequently seen in premature children with unmistakable indications of congenital syphilis. The lungs are large, the impression of the ribs being well marked; they are white or grayish-white, sometimes of a reddish marbled appearance, and are inflatable only in the slight degrees of change. The microscope shows that the intestinal tissue is normal, the alveoli being filled with epithelial cells which have begun to undergo fatty degeneration and destruction.

2. Interstitial pneumonia, in the mildest cases, presents a barely perceptible cell proliferation and tissue hypertrophy in the vicinity of the vessels and bronchi.

In the well marked cases the lungs are large, pale, or dark red, very dry, but capable of inflation; the lung tissue has a rough feeling, and the interlobular tissue is much extended. The microscope shows the bounds of the interlobular tissue to be greatly widened, and those of the alveoli to be correspondingly contracted. The widening of the meshes is caused by the increase of the connective tissue, with abundant cell infiltration, and no increase in the elastic fibres. In many cases there is a decided increase in the number of capillaries. No evidence of endarteritis was found in the lungs, but around the vessels was frequently found an increased development of connective tissue, and sometimes also around the bronchi.

The extent of the changes which take place is variable. The author found associated with this condition hypertrophy of the right heart, and ecchymoses of the pleura and pericardium. These changes in the lungs are to be found in connection with other unerring indications of syphilis, and in cases in which syphilis in the parents has been determined, so that one is justified in looking upon interstitial pneumonia as a change which is based upon congenital syphilis.

The disease usually begins during fetal life, and may have made extensive progress at the time of birth, being a means of hastening death. In mild cases the patients may recover, but the interstitial changes are apt to continue with the development of the lung, and cause contraction of the organ should the subject survive until adult life.

Children who have had this disease seem predisposed to acute inflammatory diseases of the lungs, bronchi, and pleura; they are also apt to be very poorly nourished. Children who have this disease are not apt to have tuberculosis, as the capillary ectasis, which is an associated condition, seems to give protection against it. The phenomena of the disease during life are not known to the author. They should be investigated, that the patients may be promptly submitted to antisyphilitic treatment. White and interstitial pneumonia are very important in a medico-legal sense, for the presence of lung tissue which is inflatable may excite suspicions that infanticide has been committed.

The Question of Albuminuria With Fever in Childhood.

THE object of the author's work in connection with this paper was: 1. To agitate the question, by a series of investigations of the urine in children, as to the relation of the organism of children in different diseased conditions to the changes from the normal condition of the urine. 2. To seek clinically, at least approximately, to determine the loss of albumen to the organism in connection with the albuminuria of fever.

The material included one hundred hospital cases, of which thirty-one were cases of acute infectious disease, seven being cases of petechial typhus, nineteen of typhoid, two of recurrent, and two of intermittent fever. The urine was examined as to its daily quantity, color, specific gravity, the quantity of its phosphates and its albumen, if any. The albuminuria continued two to three weeks in one case of petechial typhus and in three cases of typhoid; from one to one and one-half weeks in four cases of petechial typhus and three of typhoid; during several days albumen

was found in six cases of typhoid, and during one day in two cases of typhoid.

A study of all the cases showed that:

1. Albuminuria in typhus and typhoid fevers is a very common phenomenon, occurring in three-fourths of all children who have these diseases.

2. Albuminuria occurs most commonly during the first week or even during the first days of the disease.

3. It is difficult to define the normal duration of albuminuria; it probably averages one to one and one-half weeks.

4. The frequency of albuminuria in typhus and typhoid, and the quantity of albumen discharged bear close relation to the intensity of the febrile condition and the duration of the period of fever.

A certain number of cases of acute exanthematous diseases were also studied with reference to the relation of albuminuria to them, these being diseases in which the kidneys are most likely to be implicated, especially when they occur among children. Of the group of cases studied two were measles, two of diphtheria, and fourteen of scarlet fever, with secondary parenchymatous nephritis in different stages of development. The conclusion concerning these diseases was that the occurrence of acute eruptions is usually attended by febrile albuminuria, the intensity and duration of which depend entirely upon the intensity and duration of the accompanying fever. The albuminuria is generally of brief duration and has no particular prognostic significance. In the third or fourth week after scarlet fever a kidney affection usually appears, without œdema or general disturbance, but with albumen which gradually increases to a maximum and then as gradually diminishes until it disappears. Fever is likely to be present when the albumen first appears.

The prognosis depends upon the degree to which the kidneys are implicated.

"Take Your Medicine."

DR. C. R. ILLINGWORTH says in the *British Medical Journal*:

As is only too well known, children and infants frequently refuse to take medicines, however palatable they may have been made. A great deal of trouble may be saved, I find, by fixing the cheeks firmly with the finger, and thumb of the left hand, whilst the spoon is inserted with the right. By this method, which I first observed practised by a young married lady recently, the first essential in the act of deglutition is provided for, namely, a fixed point for the pharyngeal muscles. Ordinarily this provision is effected by closing the mouth, and there cannot, I think, be any doubt that the prevention of the natural process by the presence of the spoon leads in great part to the struggle to avoid taking medicine. When the approximation of the lips is prevented by the firm forward pressure of the finger and thumb, medicine may be poured into the pharynx without fear of its being spat out, and the most refractory child will, as a rule, discreetly swallow it. The practice of nipping the nose should, I am sure, be strongly condemned, because of the risk incurred of forcing the medicine along the Eustachian tube.—*Coll. and Clin. Record.*

Infantile Tetanus Successfully Treated by Large Doses of Chloral Hydrate and Bromide of Potassium.

DR. SHAW (*St. Louis Medical and Surgical Journal*):

Sixty hours after birth, and about forty-eight hours after treatment was instituted, about sixty grains of chloral hydrate and probably 150 grains of bromide of potassium had been given, by

the rectum, fully nine-tenths of which was retained, the masseter muscles relaxed, and the tetanoid seizures became so slight that the interval between doses was lengthened to three hours, at which interval they had to be continued for forty-eight hours longer, when the tetanoid seizures ceased. About eighteen hours after the enemas were discontinued the nurse succeeded for the first time in getting the infant to swallow.

Treatment of the Eczema of Dentition.

ACCORDING TO M. E. BESNIER, eczema of dentition is a reflex eczema from the face, and at times from the back of the hand and wrist, with tenderness of the gums and salivation. There are three indications in its treatment: 1. To allay the itching of the gums. 2. To control insomnia. 3. To cure the local condition. To allay the irritation of the gums, he recommends frequent touchings and frictions of the gums with a finger dipped in the following solution: Hydrochlorate of cocaine, gr. $\frac{5}{6}$; bromide of potassium, gr. viiss; distilled water, glycerine, of each, \mathfrak{M} cl. M.

To control insomnia, he employs teaspoonful doses, in soup, every hour, of the following mixture: Bromide of sodium, gr. ivss-viiss; syrup of orange flowers, f $\frac{3}{4}$ iss.

For the local condition he prescribes the following ointment: Oxide of zinc, gr. cl; vaseline, 3 iv.

In addition, Besnier recommends to cover the affected regions with a mask of linen or muslin coated with gutta percha. In some affected parts a sheet of mackintosh may be used.—*Gazette Hebdomadaire.*

Hysteria in Infants.

PROFESSOR GRANCHER has recently stated that the diagnosis of hysteria in infants is often very difficult, as the dis-

ease presents anomalies not usually found in that affection in adults. The most distinctly marked symptoms are: very sudden convulsive crises, quick throwing back of the head, convulsive movements of the eyes, jerking strokes of the limbs, and pharyngeal spasm. The attacks usually last about half a minute; there does not appear to be a complete loss of consciousness. At first sight, such attacks would be regarded as epileptic. The general condition of the patient and the frequency of the accessions must decide the matter. Epilepsy soon involves the general health to a very marked degree, the crises increase in number and the patient becomes progressively dispirited. In infantile hysteria, on the contrary, these conditions do not exist, and we often find the child in high spirits very soon after the attack.—*New York Medical Abstract.*

OBSTETRICS.

Normal Posture of a Parturient Woman.

THE subject of posture in labor is one which has engaged the attention of a number of writers. Dr. A. F. A. KING devotes a paper, in the *American Journal of Obstetrics and Diseases of Women and Children*, to the question as to what is the normal posture for a parturient woman? While he says that the most prudent and truthful answer is, We do not know, he concludes as follows: 1. There is no one posture that can be normal for the parturient woman. 2. The continued maintenance of one posture wastes and exhausts the forces of labor, interferes with the normal mechanism, and adds to the duration and intensity of the woman's suffering. 3. Exactly opposite results are produced by proper changes of posture. 4. The indications for change are: instinctive

desire for it; arrest of the mechanism of labor; emotional discontent, peevishness and despair. 5. The normal mechanism of labor being at present imperfectly understood, and the influence of different postures upon this mechanism, during the several stages, of the several "positions," of the several "presentations" being unknown, the selection of given postures for given conditions cannot be defined without further study.—*St. Louis Medical and Surgical Journal.*

Abortion.

IN threatened abortion, have the patient recumbent, administer cool drinks, use cold water injections, and administer opium by rectal injection.—PARVIN.—*Coll. and Clin. Record.*

Salivation of Pregnancy.

IN the salivation of pregnancy, Professor PARVIN advises the administration of potassii bromidum, and if the secretion be arrested suddenly, abortion may be caused.—*Ibid.*

Puerperal Sepsis.

WHEN puerperal sepsis occurs, and is not due to a vaginal wound, irrigate the uterus (using a Bozeman's catheter) with either bichloride, 1 to 5000, creolin, $\frac{1}{2}$ %, or acid. carbolic., 1 to 3%.—PARVIN.

Fetal Monstrosity without Trace of Body.

AT a meeting of the Obstetrical Society of New York, Dr. H. J. BOLDT presented a specimen (*American Journal of Obstetrics and Diseases of Women and Children*) expelled from the uterus of a thirty-three year old woman, immediately after the birth of her sixth child, and prior to the expulsion of the placenta. This monstrosity had placenta and membranes in common with the child, but a separate umbilical cord having a marginal attachment. The

specimen (Fig. 50) measures three and three-fourths inches in the long diameter, and two and three-fourths in the transverse diameter, the vertical diameter being three inches. On close examination it resembles a head with two imperfectly developed faces, which are on the inferior aspect of the mass and with their crowns pointing in opposite directions. The umbilical attachment is on a plane midway between the faces, but a little to one side of a line

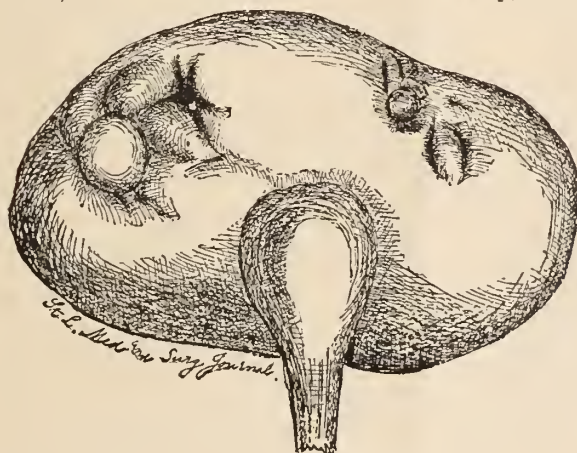


Fig. 50.

drawn from nose to nose. No record can be found in teratological works of monster without a trunk, so that this one appears to be a unique specimen.—*St. Louis Medical and Surgical Journal.*

Prevention of Laceration of Perineum in Primiparæ.

THE comparative frequency of this accident in primiparæ has called forth a paper upon this subject from Dr. DAVID P. GAUSSENN (*Dublin Journal of Medical Science*), whose means of prevention are as follows: Maintain forced flexion of the head, until the whole occiput is born, and the back of the neck distinctly felt outside the vulvar orifice, and then let extension take place and the head be born. This is best accomplished in the following way:

As the perineum and vulvar orifice are dilating and the head is about to be born, grasp the occiput with the fingers of the right hand, drawing it down with them, while, with the thumb of the same hand, push the frontal part upwards and backwards in the direction of the sacrum. As the vulvar orifice dilates more and more, continue the movement, and at the same time, with the fingers of the left hand, draw well up, off the occiput, the tissues forming the orifice, which will be found to descend more or less on it and with it, and thus maintain the head in a condition of forced flexion, until the whole occiput rests in the hollow of the right hand and the back of the neck can be felt quite clear with the fingers; then let extension take place and the head be born. By this means the vulvar orifice and perineum are only exposed to the sub-occipito-frontal diameter, and the sub-occipito-mental diam-

eter, which is $3\frac{3}{4}$ in. These are the smallest diameters of the fetal cranium. The great advantage of having the head born in a condition of complete flexion is thus apparent, and it becomes even more so when we consider that the maximal circumference of the flexed head is 13 in., while that of one measured about the extremities of the occipito-frontal diameter is $14\frac{3}{4}$ in.

Thus, in the flexed position the distending force is reduced to the least possible, being $1\frac{3}{4}$ inches less than that in the extended position, and, therefore, all things being equal, the chances of perineal rupture are reduced to a minimum.

Of course a great aid to this method, as it must be to every similar method, is to prevent the too rapid expulsion of

the fetus ; and therefore, if the pains are very strong, the patient should be encouraged to cry out, and as far as possible, to cease from "bearing down" during those which immediately precede the birth of the child. Any form of support of the perineum is injurious, except in very exceptional cases.—*St. Louis Medical and Surgical Journal*.

Induction of Labor in Kidney Disorders during Pregnancy.

DR. E. L. PARTRIDGE (*Journal of Obstetrics*) :

The author is sceptical as to the occurrence of true convulsions in connection with parturiency, without an accompanying disturbance of the renal function. The cases which seem to unsettle such a belief may be only apparent exceptions to the rule, as often the urinary signs and uræmic symptoms are of the slightest and most erratic character, and often the albuminuria may be absent on the days on which the urine is examined. As to interference with gestation in cases presenting signs of renal disturbance, no general rule can be formulated.

The history of previous uræmic attacks during former pregnancies should always make the question of arresting gestation a prominent element in the problem of treatment to be solved, and this should be answered in the affirmative in case any evidence of the same complication should be observed in the case under consideration. The author holds that the danger of a chronic nephritis, induced by the repeated attacks of the functional renal disturbance, is too great to be overbalanced by the desire to save the child, or by its rights, as there is every reason to believe that spontaneous abortion and eclampsia will follow, if an expectant plan of treatment be adopted, and that both

mother and child will be lost, by temporizing, after symptoms of uræmia have developed, in the larger number of cases. The histories of three cases are reported, all bearing on this point of organic renal disease resulting from successive attacks of puerperal uræmia, but only presenting symptoms during the existence of the pregnant state, two of which were fatal after premature labor had been induced, and the other one of recovery after spontaneous abortion at the beginning of the third month, although grave symptoms of uræmia, not preceded by any urinary signs, developed immediately after the miscarriage, but gradually subsided. The symptoms of uræmia developed in all immediately after delivery, and the amount of albumen found in the urine before labor was insignificant or a mere trace. His own conviction is that in every case in which chronic nephritis exists, the immediate interruption of the pregnancy is strongly indicated.

In "puerperal albuminuria," the purely functional disease, action in arresting gestation should depend on the amount of albumen excreted ; its tendency to increase or diminish ; the presence or absence of symptoms and the general condition of the patient. In forty per cent. of his cases of this condition he had induced labor. Vomiting, visceral disturbances and marked decrease in the amount of urine excreted, are to be regarded as grave symptoms, and demand an exercise of great vigilance and readiness for action on the part of the physician.

In the discussion following the reading of the paper, the author expressed the opinion that in the treatment of eclampsia venesection was preferable to the use of veratrum viride in the majority of cases.—*Analectic*.

The Treatment of Abortion.

DR. RALPH WALDO (*Coll. and Clin. Record*):

As there is very little difference of opinion regarding the preventive treatment, it will not be mentioned, but only the management of cases in which the symptoms of abortion have actually presented themselves.

If the hemorrhage has been slight and there is reason to think that the ovum is still intact, a full dose of morphine is given and the patient is kept absolutely quiet in bed, hoping by these means to arrest the further progress of the trouble.

If it is certain that the patient is going to abort, and she is suffering severe pain, with a rigid condition of the cervix, five grains of chloral hydrat. with ten grains of bromide of potassium are given every half hour for four doses, and in addition to this, Professor Lee suggested, in a case that he very kindly saw with me, the use of a vaginal tampon. The first piece of cotton is inserted as far as possible into the cervical canal, and the rest of the vagina is thoroughly tamponed. This procedure excites uterine contraction and also guards against any hemorrhage that might weaken the patient. If the tampon cannot be tolerated, dilatation of the os can frequently be assisted by hot antiseptic douches given at regular intervals.

If there is no undue pain, and the case is uncomplicated, the patient is kept in bed and no treatment is given, although in these cases I think the tampon a wise precaution, if the patient can stand it. If, as occurred in a case that I have cited, after giving the uterus a thorough chance it is unable to empty itself, the cervix is dilated with the fingers, if possible; if not, by the use of dilators (never tents) and it is emptied of its contents. When a part of the

products of conception is retained and the uterus ceases to act, the remainder of its contents are removed, if possible, before the cervix contracts.

In removing any thing from the uterine cavity, strict antiseptic precautions are taken, and an antiseptic intra-uterine douche is given after the organ has been entirely emptied.

When possible, every thing is removed with the unaided finger, but, if necessary, forceps and the dull curette are used. Nothing is grasped with the forceps unless the finger at the same time is on the object grasped, and then traction is only made after it has been positively determined that the forceps are not attached to the uterus. After the uterus has been entirely emptied, and only then, ergot is given and continued for at least a week; for I think that Schroeder has conclusively shown that the contracted uterus does not absorb nearly so readily as when relaxed. Lastly, the patient is kept in bed until all vaginal discharge has ceased.

Missed Labor.

GOTH (*Arch. f. Gyn.*) reports a case of missed labor due to an injury of the uterus caused by a fall at about the seventh month of pregnancy. The child died immediately after the fall. Peritonitis supervened, lasting for six weeks. There were no signs of labor until after the ninth month, when the liquor amnii escaped after an hour's pain. Weeks then elapsed with no expulsive pains. Offensive discharges persisted from this time, and the patient became profoundly septic. The first fetal bone was expelled about four months after term. Attempts at evacuation of the uterus failed owing to the impaction of a cranial bone in the lower segment of the uterus. Several bones were discharged by a utero-rectal fistula. Four-

teen months after term the uterus was emptied after splitting the cervix to the vaginal vault bilaterally. Rapid recovery followed.

Goth attributes this rare phenomenon to morbid changes in the musculature of the uterus, whereby it becomes incapable of its physiological office. These changes may be inflammatory as in the case reported, or they may be neoplastic.—*Brooklyn Medical Journal*.

Statistics of the Porro Cæsarian Operation.

DR. R. P. HARRIS (*British Medical Journal*) collates two hundred and fifty operations in fifteen countries, with one hundred and fifteen deaths, the total available record thus far (1876-1888).

It is a noteworthy fact that while there were 29 deaths in the first 50 cases, in the last fifty there were but 9; 81 operations have been reported since January 11, 1885, with 16 deaths and 1 suicide in an improving patient. The last 14 operations of 1888 saved all of the women and children but 1 each. It is expected that this record will be augmented by researches still in progress, the result of which will be published when complete.

The operations are credited as follows:

| Countries. | Cases. | Women
Recovered. |
|--------------------|--------|---------------------|
| Italy..... | 85 | 43 |
| Austria..... | 61 | 42 |
| Germany..... | 41 | 21 |
| France..... | 17 | 6 |
| England..... | 12 | 5 |
| Russia..... | 7 | 5 |
| United States..... | 7 | 2 |
| Belgium..... | 5 | 3 |
| Switzerland..... | 4 | 3 |
| Scotland..... | 4 | 0 |
| Holland..... | 2 | 1 |
| Australia..... | 2 | 2 |
| Spain..... | 1 | 0 |
| Mexico..... | 1 | 0 |
| Japan..... | 1 | 1 |

Breisky, of Vienna, and his two assistants have together operated 11 times

with no death of mother or child. Porro, of Milan (formerly of Pavia) has done 6 operations with only 1 death. The lowest mortality has been found in elective operations and in hospitals either before the full period of gestation was complete or immediately after the onset of labor. Dr. Harris says that his researches have not led him to hope for a recovery of 95 per cent. as thought possible by Mr. Tait, but they have given encouragement to believe in a possibility of 80 to 85 per cent. in very careful hands. As the Saenger Cæsarean operation has saved 66 out of 78 women in Germany, he sees no reason why the Porro method under the same degree of care cannot accomplish like results.—*Ibid*.

Manual Conversion of Face and Occipito Posterior into Occipito-Anterior Positions.

Loviot (Nouv. Arch. d'Obstet. et de Gyn., Mars, 1889.) advocates the manual conversion of face into vertex presentation of difficult face cases. He ruptures the membranes and hooks down the occiput by means of the hand in the uterus, under chloroform. Rapid delivery is then effected by the forceps.

Troublesome cases of occipito-posterior position are likewise treated by manual interference. With the hand in the vagina, the four fingers are placed behind the occipital pole, the thumb, against the anterior temple; the occiput is thus rotated to the front during a pain. Application of the forceps before releasing the head from the grasp of the hand is sometimes necessary to prevent recurrence of the malposition. It goes without saying that asepsis is a *sine qua non* in these procedures and makes scientific practice of what in preantiseptic days would have been termed meddlesome.—*Ibid*.

PUBLISHERS' DEPARTMENT.

Department of the Interior.

CENSUS OFFICE.

Washington, D. C., May 1, 1889.

To the Medical Profession ;

The various medical associations and the medical profession will be glad to learn that Dr. JOHN S. BILLINGS, Surgeon U. S. Army, has consented to take charge of the Report on the Mortality and Vital Statistics of the United States as returned by the Eleventh Census.

As the United States has no system of Registration of Vital Statistics, such as is relied upon by other civilized nations for the purpose of ascertaining the actual movement of population, our census affords the only opportunity of obtaining near an approximate estimate of the birth and death rates of much the larger part of the country, which is entirely unprovided with any satisfactory system of State and Municipal registration.

In view of this, the Census Office, during the month of May, this year, will issue to the medical profession throughout the Country "Physician's Registers" for the purpose of obtaining more accurate returns of deaths than it is possible for the enumerators to make. It is earnestly hoped that physicians in every part of the country will co-operate with the Census office in this important work. The record should be kept from June 1, 1889, to May 31, 1890. Nearly 26,000 of these registration books were filled up and returned to the office in 1880, and nearly all of them used for statistical purposes. It is hoped that double this number will be obtained for the Eleventh Census.

Physicians not receiving Registers can obtain them by sending their names and addresses to the Census Office, and, with the Register, an official envelope which requires no stamp will be provided for their return to Washington.

If all medical and surgical practitioners throughout the country will lend their aid, the mortality and vital statistics of the Eleventh Census will be more comprehensive and complete than they have ever been. Every physician should take a personal pride in having this report as full and accurate as it is possible to make it.

It is hereby promised that all information obtained through this source shall be held strictly confidential.

ROBERT L. PORTER,
Superintendent of Census.

Listerine and Lithiated Hydrangia.

THE Lambert Pharmacal Company have just issued some fresh literature, giving clinical cases and hospital reports about the use of these two valuable remedies. Physicians would do well to send a postal for these to the Company, at St. Louis, Mo.

Antipyrine.

THE owners of this patented remedy have now thrown off all masks and are advertising it the same as any other quack remedy in the daily papers, soliciting the public to buy the nostrum. As the most skillful physicians even are cautious about employing antipyrine on account of its well known action in depressing the heart's action, we may now look for daily cases of heart disease from the use of Antipyrine.

Uterine Styptic.

JOHN ADDERLY, M. D., Skibbereen, County Cork, Ireland, says : It gives me great pleasure to add my testimony to the great value of S. H. Kennedy's Extract of Pinus Canadensis, which I consider a most valuable uterine styptic, seeming not only to possess the power of arresting uterine hemorrhage, but also to produce a healthy action of the parts. I used it with a patient who had been suffering for a number of years from menorrhagia, depending upon ulceration of the os and cervix uteri, with whom I had tried all other remedies for menorrhagia, lasting during a period of five months almost without intermission. Extract of Pinus Canadensis applied to the os uteri on cotton wool, and also used as a lotion, arrested the hemorrhage immediately, and the Aletis Cordial, which was taken internally, helped to invigorate the system and promote a cure which I had at one time considered incurable. I should not wish to be without these remedies in similar cases, and shall continue the use of them in my practice, as I consider they gave most satisfactory results.

Messrs. ELI LILLY & COMPANY, of Indianapolis, have issued a work entitled "Hand-Book of Pharmacy and Therapeutics." The aim, as stated in the introduction, is to furnish the busy practitioner a reliable means of ready reference at once concise, systematic and authoritative, to which he may refer with confidence in cases of doubt. Younger members of the profession and medical students will find this work full of suggestions. It will be sent free to any physician, druggist or medical student, by addressing ELI LILLY & Co., Indianapolis, Ind., mentioning the Medical Digest.



THE DENTIST'S SOFT TEMPERED STUB STEEL ROUND

NERVE BROACHES.

OLOF JOHANSON,

PATENTEE AND SOLE MANUFACTURER,

No. 1 MAIDEN LANE,

NEW YORK.

OLOF JOHANSON,

DENTISTS' NERVE BROACH,

Patent No. 251,598. Patented Dec. 27, 1881.

Postage paid to any part of the United States and Canada.

Since patenting these Broaches, I have improved them by making them cylindrical instead of conical, permitting of a more distinct barb at the point, also the permanent attachment to each Broach of a brass stem of convenient size and length for handling. Dentists who have examined these improved broaches, and are using them, say they are perfection and far superior to any broach made, being so finely tempered, they never break in the nerve canal as is so often the case with those usually made.

By recent improvements the Broaches are made in four sizes. For Sale by all Wholesale Dealers only.

Note following from some of the most prominent Dentists in the United States.

The undersigned Dentists, state that they are familiar with all the various kinds of Dental Broaches manufactured; that they are acquainted with and have used the Broach invented, patented, and manufactured by OLOF JOHANSON of New York City; and that they consider said Broach superior to any known to them, and use it in preference to all others.

| | |
|--|--------|
| Norman N. Kingsley, No. 25 West 27th Street, New York, in practice 29 years. | |
| E. S. Woodward, No. 361 Fifth Avenue, | " 20 " |
| George F. Schaffer, No. 44 West 34th Street, | " 17 " |
| John B. Rich, M. D., No. 12 East 22d Street, | " 43 " |
| William A. Dwinelle, M. D., No. 27 West 34th St., | " 41 " |
| A. S. Northrope, No. 44 West 4th Street, | " 20 " |
| N. Malon Beckeirth, No. 125 West 42d Street, | " 42 " |
| E. Todd, No. 47 East 29th Street, | " 12 " |
| W. D. Tenison, No. 45 East 28th Street, | " 19 " |
| M. M. Maltby, D. D. S., No. 32 East 24th Street, | " 14 " |
| W. A. Bronson, M. D., No. 8 East 34th Street, | " 30 " |
| C. E. Franeis, D. D. S., No. 33 West 44th Street, | " 21 " |

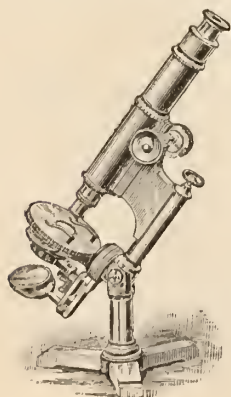
Spiral Handle.—I can furnish these Broaches with my new Spiral Handle, thus giving a flexible and pliable Handle that can be bent to any shape and be of great use to the operator.

Send all orders to

OLOF JOHANSON,

No. 1 Maiden Lane,

NEW YORK CITY.



BAUSCH & LOMB OPTICAL CO.,

MANUFACTURERS OF

Microscopes, Photographic Lenses, and
other Optical Instruments,

FACTORY AND OFFICE:

531 to 534 North St. Paul Street,
ROCHESTER, N. Y.

BRANCH OFFICE:

48 & 50 Maiden Lane, New York.

Catalogue Free.

FELLOWS' HYPO-PHOS-PHITES

(SYR : HYPOPHOS : COMP : FELLOWS)

Contains *The Essential Elements* to the Animal Organization — Potash and Lime ;

The *Oxydizing Agents* — Iron and Manganese ;

The *Tonics* — Quinine and Strychnine ;

And the *Vitalizing Constituent* — Phosphorus,

Combined in the form of a syrup, with *slight alkaline reaction*.

It Differs in Effect from all Others, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

It has Sustained a High Reputation in America and England for efficiency in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs, and is employed also in various nervous and debilitating diseases with success.

Its Curative Properties are largely attributable to Stimulant, Tonic and Nutritive qualities, whereby the various organic functions are recruited.

In Cases where enervating constitutional treatment is applied, and tonic treatment is desirable, this preparation will be found to act with safety and satisfaction.

Its Action is Prompt; stimulating the appetite and the digestion, it promotes assimilation, and enters directly into the circulation with the food products.

The Prescribed Dose produces a feeling of buoyancy, removing depression or melancholy, and hence is of great value in the treatment of MENTAL AND NERVOUS AFFECTIONS.

From its exerting a double tonic effect and influencing a healthy flow of the secretions, its use is indicated in a wide range of diseases.

Each Bottle of Fellows' Hypophosphites contains 128 Doses.

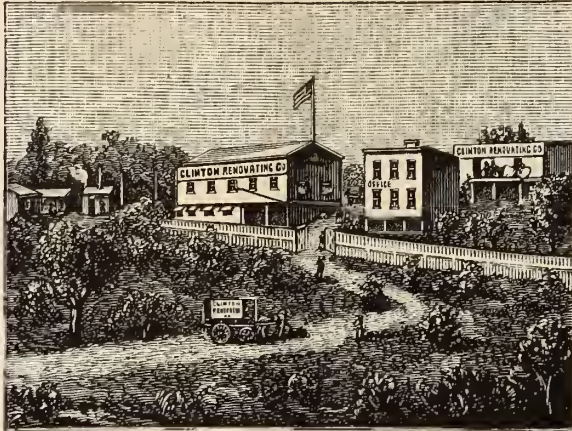
Prepared by JAMES I. FELLOWS, Chemist,
48 Vesey Street, New York.

Circulars and Samples sent to Physicians on application.

FOR SALE BY ALL DRUGGISTS.

CLINTON RENOVATING COMPANY.

OFFICE:
359
 CLINTON ST.
 Cor. Degraw,
 BROOKLYN,
 N. Y.



THE
NAPHTHA
BATH
 USED ONLY BY
 THIS
 COMPANY.

This Company calls the attention of the medical profession and the public to their system of Renovating and Disinfecting by the use of the

NAPHTHA BATH.

This process can be applied to all article of Furniture, Beds, Bedding and Mattresses, without either ripping or taking them apart. Every one who has tried this system pronounces it perfect, and the Company would like you to practically convince yourself of its merits.

Goods called for and delivered in Brooklyn, free of charge.

This Company refers to: Sheppard Knapp & Co., 13th Street and Sixth Avenue, New York.

J. R. Hegeman, Vice-Pres. Metropolitan Life Ins. Co., New York.

H. W. Maxwell, 70 First Place, Brooklyn.

Dr O. C. Gage, 26 West 31st Street, New York; and many others.

DOCTORS, LOOK HERE!!

FIRE AND BURGLAR PROOF
SAFES
 AT WHOLESALE.

WANTED!

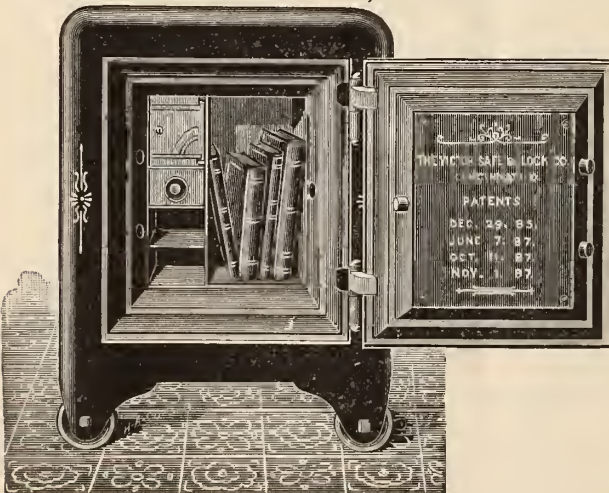
WANTED!

WANTED!

The names and addresses of all Lawyers, Doctors, Merchants, small dealers, Farmers, Housekeepers, and men of every calling

WHO HAVE NO SAFES.

We will furnish you with a first-class Safe, strictly fire-proof, burglar-proof combination lock, beautifully finished and lettered with name, at \$12 and upwards.



DEATH TO HIGH PRICES.

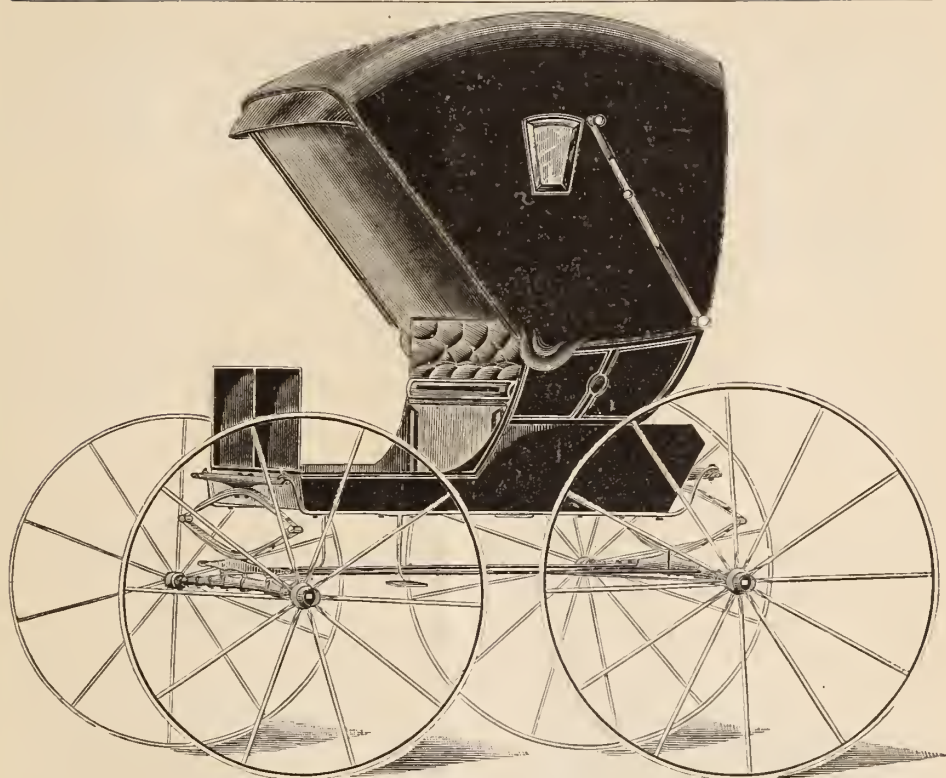
We pay no salaries or commissions to middlemen nor agents. We have no high salaried officers, but practice strictest economy to enable us to sell direct to the user at **LOWEST WHOLESALE PRICES.** The **Victor Safes and Locks** are the latest improved and are manufactured under excellent patents, issued Dec. 29th, 1885; June 7th, 1887; Oct 11th, 1887; and Nov. 1st, 1887.

Every Safe is guaranteed Satisfactory. Our prices are about 80 per cent. lower than any others. Write for our prices and terms at once. *Don't fail to mention the Digest.*

THE VICTOR SAFE & LOCK CO.,

118 West 7th Street,

CINCINNATI, OHIO.



VALENTINE LINN,

MANUFACTURER OF

FINE CARRIAGES,

47, 49, 51 & 53 BERGEN STREET, BROOKLYN, N. Y.

Telephone call 760.

*Broughams, Octagons, Coupes, Four and Six Seat Rockaways,
Victorias, Cabriolets, Extension and Canopy Top
Phaetons, and Surreys, Etc.*

PHYSICIANS' PHAETONS A SPECIALTY.

Below will be found the names of a few of the many physicians who have them now in use and will recommend them for their superior qualities. I make five different styles of them. Catalogues and Price Lists will be furnished on application.

| | |
|---|---|
| Dr. Henry Armgardt, 317 Leonard St., Brooklyn, N. Y. | Dr. William Matson, 415 Green Ave., Brooklyn, N. Y. |
| " E. S. Bunker, 117 St. Johns Place, " " | " John A. McCorkle, 149 Clinton St., " " |
| " John Byrne, 301 Clinton St., " " | " John Merritt, 22 Lafayette Ave., " " |
| " Wm. M. Butler, 507 Clinton Ave., " " | " Wm. C. Murray, 436 Lewis Ave., " " |
| " C. M. Bellows, 442 Nostrand Ave., " " | " C. H. Munroe, 363 Tompkins Ave., " " |
| " N. M. Carter, 499 Washington Ave., " " | " N. J. Preston, 98 Lafayette Ave., " " |
| " E. Eitnze, 2 Verona Place, " " | " Frank W. Rockwell, 6 Lafayette Ave., " " |
| " George Fowler, 645 Marey Ave., " " | " H. B. Smith, 131 Fort Green Place, " " |
| " William Gilfillan, Remsen & Henry St., " " | " A. Sanford, 345 Tompkins Ave., " " |
| " E. Hilton, 304 South 8th St., " " | " James Sweeney, 192 North 6th St., " " |
| " H. J. Hesse, late Coroner, 163 Bushwick Ave., Brooklyn, N. Y. | " C. B. Schlatter, 158 Seventeenth St., " " |
| " M. A. D. Jones, 163 Dekalb Ave., " " | " Chas. T. Schmidt, 73 Stagg St., " " |
| " Chas. N. D. Jones, 163 Dekalb Ave., " " | " James J. Terhune, 171 Adelphi St., " " |
| " Chas. Jewett, 307 Gates Ave., " " | " William Watersworth, 493 Franklin Av., " " |
| " Geo. C. Jeffery, 304 Jefferson Ave., " " | " Walter L. Ranney, 14 West 32nd St., N. Y. |
| " J. C. Lester, 406 Clinton St., " " | " F. W. Knapp, Orange, N. J. |
| " Nathan Matson, 415 Green Ave., " " | " W. W. Heberton, Orange, N. J. |

"The Ideal Lustre"

Is a Peculiar Brilliancy of the Teeth,
combined with a

Ruddy Healthfulness of the Gums,
by which you can at once detect the user of the



"IDEAL" IN { NAME. NATURE. RESULTS,
as slight familiarity will prove.

Recommended by Prominent Dentists everywhere, among them Dr. T. B. Arnold, 127 W. 34th St., N. Y., writes: "It has no equal for Polishing the Teeth and Hardening the Gums."

Dr. C. H. Bartlett, a noted dentist of St. Louis, calls it: "The Best thing ever offered to the public as a cleansing agent for the teeth."

Adopted in Hospitals for its cleanliness and freedom from infectious results; as a fresh polisher can be used every time at slight expense.

Its Economy. Holder (imperishable) 35 cents. Polishers only need be renewed. 18 (boxed) 25 cents. Dealers or mailed.

HORSEY MFG CO., Utica, N. Y.

TO ADVERTISERS!

For a check for \$20 we will print a ten-line advertisement in One Million issues of leading American Newspapers and complete the work within ten days. This is at the rate of only one-fifth of a cent a line, for 1,000 Circulation! The advertisement will appear in but a single issue of any paper, and consequently will be placed before One Million different newspaper purchasers; or FIVE MILLION READERS, if it is true, as is sometimes stated, that every newspaper is looked at by five persons on an average. Ten lines will accommodate about 75 words. Address with copy of Adv. and check, or send 30 cents for Book of 256 pages.

GEORGE P. ROWELL & CO., 10 SPRUCE ST., NEW YORK.

We have just issued a new edition of our Book called "Newspaper Advertising." It has 256 pages, and among its contents may be named the following Lists and Catalogues of Newspapers:—

DAILY NEWSPAPERS IN NEW YORK CITY, with their Advertising Rates.

DAILY NEWSPAPERS IN CITIES HAVING more than 150,000 population, omitting all but the best.

DAILY NEWSPAPERS IN CITIES HAVING more than 20,000 population, omitting all but the best.

A SMALL LIST OF NEWSPAPERS IN which to advertise every section of the country: being a choice selection made up with great care, guided by long experience.

ONE NEWSPAPER IN A STATE. The best one for an advertiser to use if he will use but one.

BARGAINS IN ADVERTISING IN DAILY Newspapers in many principal cities and towns, a List which offers peculiar inducements to some advertisers.

LARGEST CIRCULATIONS. A complete list of all American papers issuing regularly more than 25,000 copies.

THE BEST LIST OF LOCAL NEWSPAPERS, covering every town of over 5,000 population and every important county seat.

SELECT LIST OF LOCAL NEWSPAPERS, in which advertisements are inserted at half price.

5,472 VILLAGE NEWSPAPERS, in which advertisements are inserted for \$42.15 a line and appear in the whole lot—one half of all the American Weeklies.

Book sent to any address for **THIRTY CENTS.**



VACCINE VIRUS.

Pure and Reliable Animal Vaccine
Lymph, Fresh Daily.

LIBERAL TERMS. SEND FOR CIRCULAR.

10 Ivory Pointsdouble charged, \$1.00
10 Quill Slips (half quills)double charged, 1.00
Orders by Mail or Telegraph promptly dispatched.

NEW ENGLAND VACCINE CO.,

Chelsea Station, Boston, Mass.

WM. C. CUTLER, M. D.

J. F. FRISBIE, M. D.

CHAS. R. AVERY,

PHARMACIST,

447 COURT ST., Cor. 4th PLACE,

BROOKLYN, N. Y.

Prescriptions carefully compounded.

PARKE, DAVIS & Co.'s AND SQUIBB'S

PREPARATIONS IN STOCK.

Telephone Call, 1023.

CHARLES DENNIN,

Druggist & Apothecary

FIRST PLACE,

Cor. Court St. BROOKLYN, N. Y.

TELEPHONE CONNECTION.

SQUIBB'S PREPARATIONS DISPENSED

CELERINA

NERVE TONIC, STIMULANT AND ANTISPASMODIC.

FORMULA.—Every Fluid Drachm represents FIVE grains EACH—Celery, Coca, Kola, Viburnum and Aromatics.

INDICATIONS.—Loss of Nerve-Power (so usual with Lawyers, Preachers, Writers and Business Men), Impotency, Spermatorrhea, Nervous Headache, Neuralgia, Paralysis, Hysteria, Opium Habit, Inebriety, Dyspepsia, and ALL LANCUID conditions of the System.

Indispensable to restore a patient after alcoholic excess.

DOSE.—One or two Teaspoonfuls three or more times a day, as directed by the Physician.

LIQUID IRON - RIO

Palatable and easily assimilated. Does not produce Nausea, nor irritate the Stomach. Does not Cause Headache, nor Constipate. Does not Stain the Teeth. It is so Acceptable to the Stomach that its Use is Admissible when all other forms of Iron would be rejected. Being so Readily Assimilable, it only requires a small Dose.

Each Fluid Drachm contains ONE GRAIN of Iron in a Pleasant and Digestible Form.

DOSE.—One or more Teaspoonfuls as Indicated, during or after meals.

S. H. KENNEDY'S

CONCENTRATED EXTRACT OF

PINUS CANADENSIS

DARK.

A NON-ALCOHOLIC LIQUID.

WHITE.

A MOST VALUABLE NON-IRRITATING MUCOUS ASTRINGENT.

INDICATIONS.—Albuminuria, Diarrhea, Dysentery, Night-Sweats, Hemorrhages, Profuse Expectoration, Catarrh, Sore Throat, Leucorrhea, and other Vaginal Diseases, Piles, Sores, Ulcers, Burns, Scalds, Gonorrhea, Gleet, Etc.

When Used as an Injection, to Avoid Staining of Linen, the WHITE Pinus should be used.

RECOMMENDED BY PROMINENT EUROPEAN AND AMERICAN PHYSICIANS.

RIO CHEMICAL CO., St. Louis, Mo., U. S. A.

LONDON.

PARIS.

CALCUTTA.

MONTREAL.

MEDICO-CHIRURGICAL COLLEGE, OF PHILADELPHIA.

SESSIONS OF 1888-1889.

FACULTY.

JAMES E. GARRETSON, A.M., M.D.,
Professor of Oral Surgery and of Clinical Surgery.
WILLIAM H. PANCOAST, A.M., M.D.,
Professor of General, Descriptive and Surgical Anatomy, and of Clinical Surgery.
GEORGE E. STUBBS, A.M., M.D.,
Professor of Surgical Pathology and Clinical Surgery.
WILLIAM F. WAUGH, A.M., M.D.,
Professor of Principles and Practice of Medicine and of Clinical Medicine.
ABRAHAM S. GERHARD, A.M., M.D.,
Professor of General Pathology and of Medical Jurisprudence.
WILLIAM S. STEWART, A.M., M.D.,
Professor of Obstetrics and of Clinical Gynecology.
H. EARNEST GOODMAN, M.D.,
Professor of Principles and Practice of Surgery, Orthopedics and of Clinical Surgery.

PETER D. KEYSER, A.M., M.D., DEAN,
Professor of Ophthalmology.
THOMAS C. STELLWAGEN, M.A., M.D.,
Professor of Physiology.
FRANK WOODBURY, A.M., M.D.,
Professor of Materia Medica and Therapeutics, and of Clinical Medicine.
SAMUEL B. HOWELL, A.M., M.D.,
Professor of Chemistry.
JOHN V. SHOEMAKER, A.M., M.D.,
Professor of Skin and Venereal Diseases.
EDWARD E. MONTGOMERY, B.S., M.D.,
Professor of Didactic and Clinical Gynecology.
WILLIAM B. ATKINSON, M.A., M.D.,
Professor of Sanitary Science and of Pediatrics.

OTHER INSTRUCTORS.

ISAAC BARTON, M.D.,
Lecturer on Laryngology and Chief Asst. in Throat Clinic.
M. H. CRYER, M.D., *Lecturer on Oral Surgery.*
FRANK FISHER, M.A., M.D.,
Lecturer on Ophthalmoscopy, and Chief Assistant in Eye Clinic.
BENJAMIN T. SHIMWELL, M.D.,
Lecturer on Minor Surgery, and Chief-Assistant in Prof. Goodman's and Garretson's Surgical Clinic.
W. G. MCCONNELL, M.D., *Lecturer on Venereal Diseases.*
SPENCER MORRIS, M.D., *Lecturer on Symptomatology*
CONRAD BERENS, A.B., M.D.,
Lecturer on Otolgoy, and Chief-Assistant in Ear Clinic
W. XAVIER SUDDUTH, M.D., F.R.M.S.,
Lecturer on Diseases of the Genito-Urinary System, and Demonstrator of Pathological Histology.
HENRY C. BOENNING, M.D., *Demonstrator of Anatomy.*
E. S. GANS, M.D., *Instructor in Dermatology.*
E. L. B. GODFREY, M.D., *Lecturer on Fractures.*
A. E. ROUSSEL, M.D., *Adjunct to the Chair of Practice*
L. HARRISON METTLER, M.D.,
Lecturer on Electro-Therapeutics.
G. W. McCASKY, M.D.,
Lecturer on Mental and Nervous Diseases.
WILLIAM M. WELSH, M.D.,
Lecturer on the Eranthenata.
CHARLES M. SELTZER, M.D.,
Lecturer on Therapeutic Dietetics.
MAX J. STERN, M.D., *Instructor in Laryngology.*

E. L. VANSANT, M.D.,
Chief-Assistant in Medical Dispensary; Demonstrator of Normal Histology.
JOHN AULDE, M.D.,
Demonstrator of Physical Diagnosis.
J. W. WEST, M.D., *Demonstrator of Gynecology.*
L. GREENBAUM, M.D., D.D.S.,
Demonstrator of Chemistry.
HENRY FISHER, Ph. G., M.D.,
Demonstrator of Pharmacy.
E. GREWER, M.D., *Demonstrator of Practical Physiology.*
T. RIDGWAY BARKER, M.D.,
Assistant in Clinical Surgery.
M. F. LORMAN, M.D.,
Chief-Assistant to the Surgical Clinic.
ROBERT WHARTON, M.D.,
Assistant in Surgical Clinic.
VICTOR G. R. RHEN, M.D.,
Assistant in Pediatrics.
LOUIS VON COTZHAUSEN, M.D., Ph.G.,
Assistant in Medical Clinic.
J. J. TAYLOR, M.D., *Assistant in Medical Clinic.*
W. J. HOLLY, M.D., *Assistant in Surgical Clinic.*
C. FITZPATRICK, JR., M.D.,
Assistant in Surgical Clinic.
W. A. N. DORLAND, M.D., *Assistant in Gynecology.*
A. J. SAVAGE, M.D., *Assistant in Clinical Surgery.*
P. S. DONNELLAN, L.K.Q.C.P., L.R.C.S.I., L.M.,
Assistant in Medical Dispensary.
C. L. FISHER, M.D.,
Assistant in Prof. Pancost's Surgical Clinic.

Every candidate for admission who does not present a degree in Arts or Sciences, a certificate of graduation in a high or normal school, or a certificate of having passed a satisfactory examination of a duly organized County Medical Society, must undergo an examination in English, Latin, Physics and Mathematics. The examination may be conducted by one of the Censors or at the College. Instruction is given by lectures, clinical teaching and practical demonstrations. In the subjects of Anatomy, Pharmacy, Chemistry, Histology and Pathological Anatomy, the usual methods of instruction are largely supplemented by laboratory work. The year begins Sept. 10th, and is divided into a preliminary session of three weeks, a Regular session of six months and a Spring session of ten weeks. Students are divided into three classes according to their time of study and proficiency. Students who have begun their professional studies elsewhere may be admitted to advanced standing upon satisfactory examination in the branches already pursued by the class to which they seek admission. Although the degree of DOCTOR OF MEDICINE is conferred at the end of three years' study, a fourth year is provided which is voluntary (but) attendance upon which will afford the student increased facilities for practical study in clinical medicine, surgery and the various specialties.

ORDER OF STUDIES:

FIRST YEAR:—Anatomy (bones and ligaments), Physiology, General Chemistry, Materia Medica and Pharmacy, General Pathology and Hygiene. SECOND YEAR:—Anatomy (muscles, vessels and viscera), Medical Chemistry, Physiology, Physical Diagnosis, Therapeutics, Clinical Medicine, and Clinical Surgery. THIRD YEAR:—Anatomy (Nervous System), Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgical Pathology, Surgery, Clinical Surgery, Ophthalmology, Dermatology, Syphilis, Diseases of Women, Diseases of Children, Electro-Therapeutics and Forensic Medicine. FOURTH YEAR:—Ophthalmology, Otolgoy, Dermatology, Syphilis, Laryngology, Mental and Nervous Diseases, Diseases of Women, Diseases of Children, Clinical Medicine, Clinical and Operative Surgery, Orthopedic Surgery, Oral Surgery, Forensic Medicine, Genito-urinary Diseases, Diseases of the Rectum, Diseases of the Female Bladder, Bacteriology, Clinical Microscopy, Preparation of Food for Infants and Invalids and Anæsthetics.

REQUIREMENTS FOR A DEGREE:—Every candidate must be twenty-one years of age, must have attended three or four full terms, one Winter session of which was spent at this school, have passed a written examination upon the prescribed studies of the course.

FEES:—Matriculation, \$5; for the first and second years, each, \$75; for the third year (graduation included), \$100; for the fourth year, to graduates of this school free; to graduates of other schools upon the payment of a matriculation fee, only graduates of a three years school will be permitted to join the graduating class for the degree of this school upon the payment of a fee of \$40. The above fees are conditional upon their being paid before Nov. 1st.

For further information, or Catalogue, address

Dr. E. E. MONTGOMERY, Sec'y, 1818 Arch St., or
Medico-Chirurgical College, Philadelphia, Pa.

THE STROUT Heating and Ventilating System,

*FOR DWELLING HOUSES, CHURCHES AND
PUBLIC HALLS.*

H. C. STROUT & CO.

(Successors to Strout & Williams),

MANUFACTURERS OF

Strout's Patent Heating and Ventilating Attachments.

OFFICE:

No. 564 STATE ST., Cor. Flatbush Ave., BROOKLYN, N. Y.

The object of the Strout System is to equalize the temperature of buildings and prevent direct drafts and an unequal distribution of hot air, regulating its circulation so that all portions, upper and lower, shall be of uniform temperature and purity.

The system is exclusively adapted to dwelling houses, churches and all public halls and buildings that are heated from either the enclosed or portable furnace. It can readily be applied to any furnace in present use. The practical introduction of the same has invariably shown:

1. Its health-giving qualities in preserving at all times a pure circulation of heated air.
2. It makes the furnace distribute its maximum of heat, with a saving in coal of not less than 25 per cent., and in churches and public halls the gain is even greater.

For further particulars and circulars, address manufacturers as above.

THE COLLEGE AND CLINICAL RECORD.

EDITED BY DR. R. J. DUNGLISON.

MONTHLY. TWO DOLLARS PER ANNUM.

PORTRAIT OF DR. SIMS AND PROF. PARVIN'S LECTURE BOTH GIVEN AS PREMIUMS.

HANDBOOK OF DIAGNOSIS, THERAPEUTICS, Etc.

By Dr. DUNGLISON. Cloth, \$3.50, net; leather, \$4.00, net.

THE PRESENT TREATMENT OF DISEASE.

By Dr. DUNGLISON. Cloth, \$2.50, net; leather, \$3.00, net.

LIBERAL
DISCOUNT

ON ALL

BOOKS,

NO MATTER BY WHOM
PUBLISHED.

SEND FOR
COMPLETE LIST.



(FROM HANDBOOK OF DIAGNOSIS, THERAPEUTICS, Etc.)

HYGIENE OF THE SEXUAL FUNCTIONS.

Lecture by Prof. THEOPHILUS PARVIN. 20 cents.

PHOTOGRAPHS OF MEDICAL MEN.

Cabinets, 50 cts.; Panels, 10½ x 17, \$3.00; 20 x 24, \$4.00.

STEEL PORTRAIT OF DR. J. MARION SIMS.

25 cents.

SPECIAL
ATTENTION GIVEN TO
SELECTION OF

Microscopes,
Batteries,
Instruments,
Pictures, Etc.

WM. F. FELL & CO., Publishers, 1220-24 Sansom Street, Philadelphia, Pa.

DIOVIBURNIA

A POWERFUL UTERINE TONIC AND ANTISPASMODIC.

The most **PERFECT** compound **EVER OFFERED** to the **MEDICAL PROFESSION** for the relief of the following female disorders: **DYSMENORRHOEA, AMENORRHOEA, MENORRHAGIA, LEUCORRHOEA, SUBINVOLUTION, PUERPERAL CONVULSIONS, RELAXED condition of UTERUS and APPENDAGES and THREATENED ABORTION**; directing its action in a most remarkable manner to the entire **UTERINE** system as a general tonic and **ANTISPASMODIC**, and in cases of impaired vitality. *Complete Restoration follows its use.*

This happy combination is the result of an **EXTENSIVE PROFESSIONAL EXPERIENCE RUNNING THROUGH A SERIES OF YEARS**, in which the constituent parts have been **FULLY TESTED**, singly and in combination, in various proportions, until **PERFECTION** has been **ATTAINED**. We, with the profession, have no regard for secret remedies.

DIOVIBURNIA

is prepared for prescribing exclusively, and the Formula as given, will commend itself to every intelligent physician.

FORMULA.

VIBURNUM PRUNIFOLIUM, VIBURNUM OPULUS, DIOSCOREA VILLOSA, ALETRIS FARI-
NOSA, HELONIAS DIOICA, MITCHELLA REPENS, CAULOPHYLLUM
THALICTROIDES, SCUTELLARIA LATERIFLORA.

Every ounce contains ¾ dram each, of the fluid extract. For further information see bottom of this page.

PALPEBRINE

A TRUSTWORTHY REMEDY IN EXTERNAL EYE DISEASES.

THE forms of disease for which this compound is highly recommended are the following:
Simple Conjunctivitis, Acute and Chronic Catarrhal Conjunctivitis, Vernal Conjunctivitis, Acute and Chronic Blenorrhœal Conjunctivitis, Strumous or Scrofulous Conjunctivitis, Marginal Blepharitis and Inflammation of the Lachrymal Sac.

PALPEBRINE is not a *secret* remedy, and in offering it to the general practitioner we give the formula in full. It contains no unknown and untried agents, but is composed of the following well-known drugs which will commend it to the profession at once.

FORMULA AND MEDICAL PROPERTIES:

| | |
|--|--------------------|
| ACIDUM BORACICUM, [an antiseptic] | One per cent. |
| HYDARGYRUM BICHLORIDUM, [an antiseptic and irritant] | One part in 5,000. |
| TINCTURE OF OPIUM, [nerve tonic, slightly narcotic] | A trace. |
| ZINCUM SULPHURICUM, [an irritant astringent] | One part in 1,000. |
| GLYCERINUM PURUM, [an irritant] | One part in 10. |

EYE diseases are the best and most fruitful field for quackery, and the amount of harm being done by *quacks* and *patent medicines* in eye diseases is fearful to behold. In offering **PALPEBRINE** to the profession we wish to give to the busy practitioner a reliable and safe remedy, easily prescribed, of known qualities and quantities. We are certain after a trial our efforts will be appreciated.

TO any physician, unacquainted with the medicinal effects of **DIOVIBURNIA** and **PALPEBRINE**, we will mail pamphlet containing full information, suggestions, commendations of some of the most prominent practitioners in the profession, and various methods of treatment; also a variety of valuable prescriptions that have been thoroughly tested in an active practice, or to physicians desiring to try our preparations, and who will pay express charges, we will send on application a full size bottle of each free.

DIOS CHEMICAL COMPANY, ST. LOUIS, MO., U. S. A.

CLASSIC—
Unique—



Grotesque—

Romantic



~~~~~for~~~~~  
Publishers~~~~~  
~~~~~Merchants~~~~~  
~~~~~Societies~~~~~  
~~~~~Advertisers~~~~~

P. F. McBREEN
PRINTER

61 BEEKMAN STREET

NEW YORK

Steam Power
Improved Presses
New Type

Estimates Furnished

Established 1872

A Peerless Chemico-Physiological Food and Restorative

**Crystalline
Phosphate**

TISSUE FOOD



Contains all essential inorganic components of the tissues in a semi-solid, easily soluble, crystalline mass,

COMPOSED OF

ACID PHOSPHATE OF CALCIUM.

WITH

| | |
|------------------------------|------------------------|
| Acid Phosphate of Magnesium, | Chloride of Potassium, |
| " " " Iron, | " Sodium |
| " " " Sodium, | Sulphate of Potassium, |
| " " " Potassium, | and Phosphoric acid. |

INDICATIONS:

STOMACH DISORDERS, such as Indigestion, Flatulence Gastric Catarrh, and Poor Appetite, Constipation, etc.

WRONGS OF NUTRITION, as in Scrofula, Rickets, Caries, Marasmus, Delayed Union of Fractures, Necrosis of Tissue, Difficult or Delayed Dentition and Development, etc.

NERVOUS AND GENERAL DEBILITY AND SLEEPLESSNESS, as from Sexual Excess, Venereal Disease, Childbearing, Nursing, Loss of Blood or other fluids, Menstrual and other Diseases of Women, abuse of Alcohol, Tobacco and Narcotics, Protracted Illness, etc.

DEBILITY AND DYSPEPSIA.—*Your preparation of Crystalline Phosphate, I have found to be very excellent in cases of Debility from Nerve Exhaustion. It is a good auxilliary in Gastric and Dyspeptic Troubles, and from my experience I regard it as a reliable preparation.* T. GRISWOLD COMSTOCK, A. M., M. D., PH. D., St. Louis, Mo.

Write for Samples and Treatise—Mailed Free. Mention this Journal.

PROVIDENT CHEMICAL WORKS, - - ST. LOUIS, MO., U. S. A.

E. C. RICH CO., Limited, New York City, Eastern Agents,

No Chemicals.



W. BAKER & Co.'s

**Breakfast
Cocoa**

**Is Absolutely Pure,
and it is Soluble.**

To increase the solubility of the powdered cocoa, various expedients are employed, most of them being based upon the action of some alkali, potash, soda or even ammonia. Cocoa which has been prepared by one of these chemical processes, can usually be recognized at once by the distinct alkaline reaction of the infusion in water.

W. Baker & Co.'s Breakfast Cocoa

is manufactured from the first stage to the last by perfect mechanical processes, **no chemical being used in its preparation.** By one of the most ingenious of these mechanical processes the greatest degree of fineness is secured without the sacrifice of the attractive and beautiful red color which is characteristic of an absolutely pure and natural cocoa.

W. Baker & Co., Dorchester, Mass.

BOUND VOLUMES FOR 1888

Subscribers sending us the twelve numbers for 1888 with \$1, can have them returned handsomely bound. Any missing number will be supplied for twenty cents additional.

THE ANALYST PUBLISHING CO.,

19 Park Place,

New York.

THE "CREAM" OF THE SUBJECT.

"The deficiency of butter does, however, seriously impair the nutritive value of the milk, for fat plays a most important part in nutrition.—JACOBI. "Infant Diet."

The Milk Foods, both dried and condensed, are deficient in cream. They show, both by analyses and simple computation, less cream than should be present when prepared from whole cows' milk. Gerber's analyses of milk foods give the average proportion of fat as 5.50 per cent.; and other published analyses of those milk foods show from 2 to 7 per cent. of fat.

The minimum quantity of water used in making such "Milk Foods" ready for the nursing bottle must obviously reduce the meagre proportion of fat to a degree utterly inadequate to the necessities of nutrition. Likewise in preparing the so-called "Infant Foods" for the nursing bottle, the originally deficient proportion of cream in the cows' milk is still further reduced, but no attention is paid to this fact and no directions given for the artificial addition of cream to compensate.

It was with the introduction of the "Peptogenic Milk Powder" and the "Fairchild" process, that the addition of cream was first directed in the preparation of a designed substitute for mother's milk.

In recommending the use of cream, we by no means overlook the fact that this is attended by some inconvenience and expense, and we also know that this is often urged as an objection to the "Fairchild" process, but it is no more a necessary and essential portion of our process to add cream than it is in any other process.

Upon what grounds can a manufacturer, claiming to offer an equivalent for mothers' milk, ignore the use of cream?

There is certainly upon physiological grounds, or from experience, no reason to suppose that fat is an unimportant constituent in the natural food secreted for an infant.

Is the well-known deficiency of cream satisfactorily explained by the fact of the impossibility of the practical manufacture of a food which shall contain the due amount of cream?

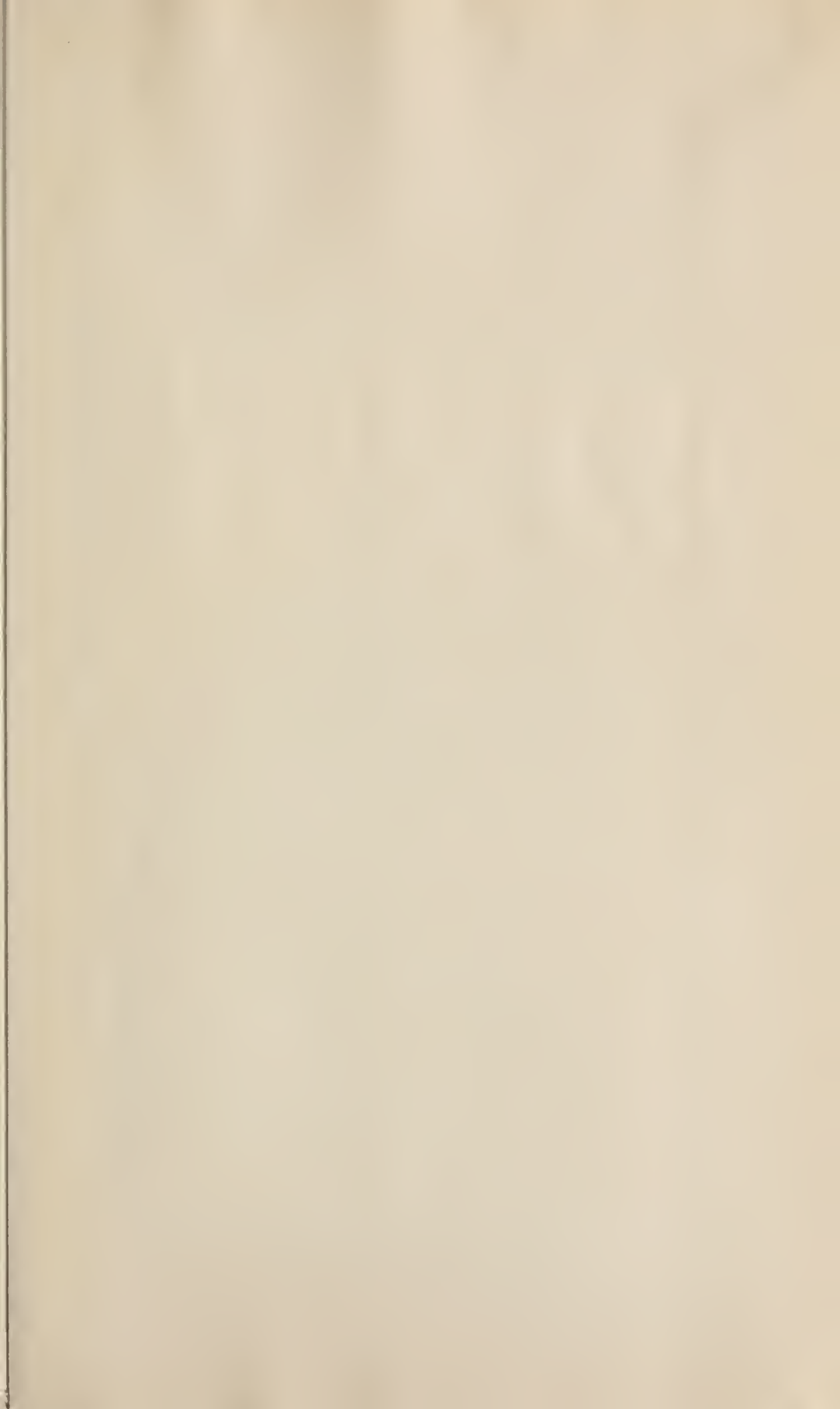
If, for any reason, it is thought expedient in any case to dispense with the cream, then the "Peptogenic Milk Powder" can still be used with the result of giving a food which will compare favorably in fatty constituents with any other food, whilst in other respects, in the proportion of proteids and in their qualitative condition and in every other constituent, it will still yield a food far more like mothers' milk than is obtained by any other method.

FAIRCHILD BROS. & FOSTER,

Makers of PEPTOGENIC MILK POWDER,

82 & 84 Fulton Street, N. Y. City.





COLUMBIA UNIVERSITY LIBRARIES

This book is due on the date indicated below, or at the expiration of a definite period after the date of borrowing, as provided by the library rules or by special arrangement with the Librarian in charge.

[illegible]

AMERICAN MEDICAL DIGEST

V.8 JAN.-JUNE 1889

c.1

SEP 14 1962 BINDERY

COPY 1

